

INSIDE DOPE

by GEORGE F. TAUBENECK

Portrait of a Prairie Principality
Peace and Happiness
Age-In-the-Wood Respectability
Outlets for Proper Emotions
'Says in the Paper'
Peaceful People
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Portrait of a Prairie Principality

Marshall, Illinois, was unique for a long time.

In almost every other respect this grand town has run true to form. Like many another middle-western county seat denized by friendly, honest, home-loving, loyal citizens, it is proud of its history and traditions, its stores and homes and churches, its wise elders and promising young folk. It is truly American in the best sense of that wonderful word.

Marshall's great claim to fame, however, lies in the population total it boasted when the writer was a boy. From 1910 to 1925 Marshall had an unvarying census figure of 2,222. This magic number appeared on signboards near the city limits at each of the four entrances to the town.

No particular capital of this toot-toot figure was made by the citizenry, however—outside of the corny joke that every time a baby was born someone left town. Marshallites are much prouder of the facts that two major cross-continental highways, the National Old Trail and the Dixie Highway, intersect right in the middle of town; and that porch lights aren't charged against electrical bills.

Municipal advertising, and many business letterheads, carry the slogan: "Where the Highways Cross and the Porch Lights Burn All Night." (The publishing establishment which employed the writer then made plenty of money out of that letterhead.) Hundreds of automobiles, trucks, and buses roll over these transcontinental highways right through the middle of Marshall every day.

Hence, opportunists extract dribbles of cash from these streams of through traffic. Filling stations rear red and yellow heads on each of the big highways. Some intersections support two or three gas stations. All prosper.

Many houses along these lanes carry signboards proclaiming that weary tourists may find lodging within at reasonable rates. They can, too. Just like home—often better! And the restaurants are almost as numerous.

Tourists and truckers are welcome and well treated. However, they are but ripples on the surface of Marshall life.

Peace and Happiness

No factories are located inside this municipality; crime and vice seem to be non-existent; and practically nothing of a startling nature ever happens. Peace, contentment, and deep-well happiness are the chief products.

Retired farmers make up a considerable portion of the inhabitants. Among the other substantial citizens are businessmen who specialize in catering to rural folk. The latter, in turn, hope to retire or open a store in town some day. The circle is anything but vicious, and these people enjoy unhurried, neighborly, entirely friendly lives.

In leisurely fashion they transact business five days a week, work fast on Saturdays when farmers come to town, go to church Sunday morning and evening, take short automobile rides or play golf or just "visit" Sunday afternoon.

The movie theater, and a few quiet taverns and clubs, provide the only "night life." None other is needed.

Mid-row type drunks are as rare as corpses on Main Street—and only two murders have been committed there in almost a century-and-a-half!

Home talent plays, band concerts, and social affairs sponsored by churches and the high school supplement the week's quota of beer and Hollywood "escape" presentations. A few citizens do visit Terre Haute, Indiana. (Concluded on Page 6, Column 1)



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New Models Introduced by 3 Manufacturers

Philco Announces 2 New Refrigerators

DETROIT—Two new refrigerators have just been brought out by Philco Corp., it was reported here.

They are models 916 and 1116. The former is a 9-cu. ft. refrigerator retailing for \$289.95. It has a frozen food storage capacity of 42 lbs.

Model 1116 has a capacity of 10.7 cu. ft. and includes a 2-cu. ft. freezer compartment holding 70 lbs. of frozen foods. List price of this model is \$359.95.

It was also reported that electric range model 417, which had been discontinued some time ago because the company couldn't obtain enough metal for certain features, has been returned to the line.

These features include the built-in "jiffy griddle," the "broil-under-glass" oven feature, "thermocolor" controls, and the "jiffy lift" on the deepwell cooker unit. This model without these features was being produced as model 417-D, priced at \$379.95. Model 417 lists at \$399.95.

RSES Makes Plans For Nov. 3 Meeting

CHICAGO—Preliminary arrangements are well under way for the 14th annual convention of the Refrigeration Service Engineers Society to be held here Nov. 3 to 6 in conjunction with the All-Industry Show.

The convention opens on Saturday, two days ahead of the show itself, which runs from Nov. 5 to 8, Monday through Thursday.

Floyd Lilley of Chicago has been appointed convention chairman by Cecil Visger, international president of RSES, with William J. McCarley of Joliet, Ill., and Ed Riccio of Chicago acting as co-chairmen.

Other committee heads include Dwight D. Orr of the Herman Goldberg Co., entertainment; Willis Staf- (Concluded on Page 4, Column 5)

Natural Gas Curbed by U. S. In 15 States

WASHINGTON, D. C.—Limitations on use of natural gas for home heating as well as large volume industrial and commercial consumption have been imposed in 15 eastern and midwestern states and the District of Columbia by the Petroleum Administration for Defense.

New large volume users in the industrial or commercial applications must get PAD's okay before a gas utility in any of the 15 states can take them on, according to the order. Consumption of natural gas in the amount of 500 or more therms a day (Concluded on Back Page, Column 4)

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6-Ft. Refrigerator Added by Sanitary

(See Picture on Page 4)

FOND DU LAC, Wis.—A modern, full length door is one of the features of the new 6 cu. ft. Quickfreez made by the Sanitary Refrigerator Co., here.

Color has been added to this new Sanitary model. The handle of the frozen food compartment, and the outside strip of the chill tray (just below the compartment) are finished in light blue. The frozen food compartment will hold up to 32 lbs. of food.

Frigidaire Adjusts Appliance Prices

DAYTON—In a price announcement, Frigidaire Division of General Motors Corp. showed no change in refrigerator prices, small decreases in prices of automatic washer and window-type air conditioners, and slight increases in prices of electric ranges, electric water heaters, and dehumidifiers.

The suggested retail price of the automatic washer was reduced \$2.50 and air conditioners \$8 to \$9.

The dehumidifier was increased \$10.25, but company officials pointed out that the new suggested retail price of \$142 is \$7.75 less than the price in effect throughout 1949 and 1950.

Suggested range price increases varied from \$4.10 on a \$162.75 model (Concluded on Page 4, Column 4)

Kelvinator Shift Affects H. A. Willis, W. E. Saylor

DETROIT—Two executive changes in the Kelvinator sales department were announced by Charles T. Lawson, vice president of Nash-Kelvinator Corp. in charge of Kelvinator sales.

H. A. Willis, electric range and water heater sales manager, has been transferred to the advertising and sales promotion department as manager of national advertising, a new position "created in line with the increasing importance of television and all consumer advertising."

W. E. Saylor has been appointed (Concluded on Back Page, Column 3)

5 Freezers, 9 Ranges Shown by Crosley

NEW YORK CITY—A new line of five Shelvador home freezers, nine electric ranges, and 21 television receivers was introduced last week by Crosley division of Avco Mfg. Corp. The company indicated that new Shelvador refrigerators would be announced in late September or early October.

W. A. Blees, Crosley general manager, expressed the belief that appliance and TV sales would turn upward after Labor Day as excessive inventories are being liquidated.

"Our economy is now getting its second wind," he said, "and distress goods should be cleared out by Christmas. The public has digested the heavy volume of scarce purchases and is now ready to resume buying."

He cited the recent relaxation of Regulation W and the elimination of price rollbacks as factors working for a business pickup.

The new freezer line contains three custom models and two deluxe models. There are 8.2 and 14.5-cu. ft. units in both deluxe and custom (Concluded on Page 4, Column 4)

OPS Postpones Mfr's. Price Regulation

WASHINGTON, D. C.—Just before the Aug. 13 deadline for putting the manufacturer's price regulations into effect, the Office of Price Stabilization indefinitely postponed the deadline until it could issue regulations to carry out the Capehart amendment to the Defense Production Act.

This amendment requires OPS to adjust ceilings to reflect cost changes, including overhead, up to July 26.

Filing and reporting provisions, as well as the pricing provisions, are postponed, the OPS added.

The agency explained that manufacturers could still price their products under CPR 22 or 30 if they wanted to. But if they do so, they will have to put any rollbacks into effect as well as the permitted price increases. Manufacturers who have already put CPR 22 to 30 prices into effect are not affected by the postponement. Manufacturers who have not yet put themselves under these regulations will not have to do so until OPS takes further action.

Air Conditioning--A Boon to Law and Labor

Florida Court Houses May Get Air Conditioning

ORLANDO, Fla.—The ruling of Florida's attorney general, Richard W. Ervin, that Volusia county's court clerk, Jess Mathas, can use excess fees for air conditioning his offices may start a wave of air conditioning in Florida court houses.

Ervin said he believes the law will permit installation of air conditioning just as it does the adding of other facilities to handle office work.

"Air conditioning will undoubtedly add to the comfort and efficiency of the office and I believe that language of the law is sufficiently broad to permit its (air conditioning machinery) purchase," Ervin ruled.

Orange county commissioners are ahead of the game in this respect. (Concluded on Page 4, Column 1)

Comfortable Congressmen Work Through Summer

DETROIT—"Air conditioning is changing the processes of legislation in the Nation's Capitol."

This fact was pointed out recently by James M. Haswell of the Washington bureau of *The Detroit Free Press*.

"Congressmen are talking about going home at the end of September," Haswell wrote. "But should they? Some of the members are safer in Washington than they would be in their home districts. And all of them are a lot more comfortable."

"My story is that air conditioning is changing the processes of legislation in the Nation's Capitol. Formerly the elderly men who run the Congressional show refused to do business during Washington's hu- (Concluded on Page 4, Column 5)

Most Appliance Firms File for Allotments

Two Thirds of Consumer Goods Manufacturers Face Shortages

WASHINGTON, D. C.—Although appliance manufacturers have a good record of compliance with National Production Authority instructions to file their fourth-quarter needs of aluminum, steel, and copper before Aug. 15, nearly two thirds of consumers durable goods manufacturers have failed to file.

"The most alarming thing about this failure to file," declared H. J. Holbrook, head of NPA's consumer durables division, "is that a manufacturer who doesn't send his application in now will be unable to get advanced allotments for the first three quarters of next year."

Advanced allotments are intended to insure a continuous flow of orders to mills and to suppliers of the three metals.

Holbrook believes that one reason some manufacturers have failed to file is because they have large inventories of finished goods. Therefore, (Concluded on Back Page, Column 2)

MRO Orders Held To 40% 1st Month

WASHINGTON, D. C.—To prohibit manufacturers from flooding the market with orders for maintenance, repair, and operating supplies at the beginning of each quarter, the National Production Authority amended CMP Regulation 5, which governs procurement of MRO items.

The amendment provides that manufacturers cannot order or receive more than 40% of their quarterly quotas of MRO items during the first month of any quarter. Quarterly quotas as based on 120% of the dollar value of 1950 MRO purchases. Formulas for computing these quotas are embodied in CMP Regulation 5.

NPA pointed out that manufacturers who have placed orders totaling more than 40% of their fourth-quarter 1951 quotas must cancel the excess amounts.

Cy Miller, Risac Head, Dies of Heart Attack

NEW YORK CITY—Cyrus W. Miller, executive secretary of the Refrigeration Industry Safety Advisory Committee (Risac), died of a heart attack Aug. 13 at his home in North Tarrytown, N. Y. He was 55 years of age.

A 1918 graduate of Cornell university and a mechanical engineer, Miller got his first experience with the U. S. Army Ordnance Department. Later he joined the North Eastern Power Corp., serving as supervisor of refrigeration for its (Concluded on Page 4, Column 1)

Texas Telephone Workers Want Cooling Commitment

DALLAS—Demanding that the company give a definite commitment as to when air conditioning will be installed, some 600 to 700 long distance, information, and "assistance" operators walked off the job last week in two telephone exchanges here.

Previously operators in Houston and Waxahachie had done likewise as the record heat wave had much of Texas sweltering.

The walk-out was not authorized by the union, according to Ed Webb, who heads the Communications Workers of America (CIO) in Dallas, which has been discussing air conditioning for five years with Southwestern Bell Telephone Co.

The operators, he said, "don't expect air conditioning right away, but they do want a commitment."

American Refrigeration Corp. Saves Freezer Stocks for Minneapolis Storm Victims

MINNEAPOLIS—When winds of hurricane velocity ripped down power lines and caused considerable other damage hereabouts during a mid-summer storm, American Refrigeration Corp. came to the rescue of freezer owners.

"Some parts of the city were without power for several days, and our plant opened its doors to freezer owners who were in danger of losing their food," explained R. W. Dreher, American's director of sales.

"The boys worked late into the night over the weekend, and they estimate that 35,000 lbs. of food valued at \$40,000 were saved."

Sunroc Gets Order for 750 Water Coolers for Army

GLEN RIDDLE, Pa.—During October and November, Sunroc Co. will deliver 750 water coolers of various models and capacities on a contract recently awarded them by the Chicago Quartermaster Depot, U. S. Army Quartermaster Purchasing Division.

It is expected that these will be the first water coolers produced in the new quarter-million dollar plant which Sunroc is building.

Carrier Contract Calls For Armored Tank Hulls

SYRACUSE, N. Y.—A contract for quantity production of 15-ton armored steel hulls for the Army's new M-47 medium tank at Carrier's heavy machinery plant on Thompson Rd., was recently announced by Cloud Wampler, president of Carrier Corp.

The tank order is one of several major defense contracts undertaken by Carrier, totalling in aggregate more than \$50,000,000, which includes its recently announced contract for production of essential parts for General Electric's big J-47 turbojet engine.

The tank hulls will be produced under subcontract to the American Locomotive Co. of Schenectady. Tooling is now in progress, involving some \$5,000,000 worth of welding equipment, boring mills, and other special machine tools, to be purchased for government account.

Two large aisles in the heavy machinery plant, covering some 120,000 sq. ft. of space, have been set aside for the new contract. A new \$1,200,000 Carrier building on Thompson Rd., to be known as TR3, is now being constructed under a government certificate of necessity in order to free this space in TR1.

Wampler said that the initial order will be executed over a year's time.

Wiedemer Dies; Headed Restaurant Equipment Firm

BUFFALO, N. Y.—George M. Wiedemer, 68, president of Cable-Wiedemer, Inc., and a pioneer in the commercial refrigeration business, died Aug. 8 after an illness of several months.

Wiedemer helped found the Food Service Equipment Industry and the National Commercial Refrigerator Sales Association. He was a director of both organizations.

Wiedemer came here from Buffalo in 1934 to organize the Cable-Wiedemer firm, a restaurant equipment supply house at 138 State St.



DINNER-DANCE promotion began with a dinner served by Kroger Co., who was given the chance to publicize its Tenderay beef.



DISHWASHER SKETCH with Lee De Angelo, Hotpoint dishwasher sales manager, and Cassy May Stone, home economist, was humorous and mildly commercial.

Speed Selling Isn't Always the Answer, Says Dealer Who Gave a Party To Build Future Sales

HUNTINGTON, W. Va.—"Speed selling," so popular today, is not the only method of making the sale of a given appliance, in the opinion of Frederick Schwartz of Frankel's Appliances, Inc. here.

This conclusion, he declared, is more than warranted by the success of a dinner-dance promotion conducted by the company primarily to develop future sales of dishwashers.

"The retailer of today has geared his organization in such a manner of speed that anything but almost immediate results during the course of a promotion is held in the negative," he said.

"The general thought today is to sell the individual when you have, through various methods, finally persuaded him to come into your store. There is little regard for the potential sale, the prospect, the customer of tomorrow. A promotion geared for future sales results is something of the past, something not frowned upon but definitely not utilized in today's speed-selling methods.

"In a planned effort to return to a reasonable means of building up a future sales potential, Frankel's attempted a direct appeal to a group where specialized selling was a necessity. The item used was the dishwasher.

"Primarily, it can be categorized as an appliance that is not regarded as a necessity, having limited appeal to a higher bracket income group, and secondly, the installation of same would further limit its appeal to homeowners only.

"To aim the promotion at this group, the Women's Club of Huntington, a fairly exclusive organization, was used as a test group. Its 150-person membership was in the above-average income bracket, and the home ownership ratio was extremely high.

"Because of the assumed high intellect of the club membership, it was felt that the promotion would have to consist of a presentation with virtually little or no direct commercial aspect.

"Negotiations were made with the club officers for permission to arrange for a banquet to be given on a Saturday evening in the club ballroom for the club members and their husbands, under the auspices of Frankel's.

"The club mailing list was secured and formal invitations, with reply cards, were sent to 150 members. Subsequently, 84 replies were received, so an attendance of approximately 170 persons was expected.

"Realizing that the cost of a dinner for 150 or more persons would be prohibitive, the Kroger Co. was con-

tacted and agreed to donate all the food for the privilege of securing some time to publicize their Tenderay Beef on the program.

"Dinner menu folders were printed, the dinner consisting of fruit cocktail, chef salad, Tenderay prime ribs of beef, baked Idaho potatoes, peas and carrots, fresh baked apple pie with cheese, and coffee.

"The dinner was scheduled from 8 to 9 p.m., the formal program commencing thereafter. Kroger was given 20 minutes to show a color film on beef.

"This was followed by a range

demonstration. The stage was set with three different price ranges. A five-minute dissertation on the features and values of each range was given by a different home economist.

"The highlight was the taking out of the low-end range a complete meal for eight, proving that even the least expensive of the ranges can give maximum performance. No mention of price, or where the ranges were obtainable was made.

"This was followed by the dishwasher portion of the program. A sketch written and acted in by a national sales promotion manager

proved the highlight of the evening. The sketch depicted an average home before and after the dishwasher purchase, with hilarious undertones that provoked extensive laughter. This was followed by a two-minute talk on the features of the dishwasher.

"The finale to the program consisted of a two-minute curtain talk thanking the attending persons, and reminding them of the door prizes to be given an hour hence, and an introduction of Frankel's sales personnel. Purpose of the hour wait was to allow time for Frankel personnel to station themselves around various live action displays in the ballroom, so that prospective purchasers or inquiries could be taken care of.

"During the dinner, a five-piece orchestra played. In the course of the program, musical interludes were used to accent the presentation. Dance music was provided for the

(Concluded on next page)

"OPERATING"

—objective in air conditioning new "LOOK" Building is

The 25-story "Look" Building, 488 Madison Avenue, N. Y., designed by the architectural firm of Emery Roth & Sons, N. Y.



THE PROBLEM. Because of varied needs of prospective tenants in the swank, ultramodern all-window "Look" Building on New York's famed Madison Avenue, the builders—Unit Brothers, N. Y.—realized that air conditioning had to be supplied on an extremely flexible basis. It was known that offices of some tenants would frequently be occupied far into the night, others, perhaps the majority, would close at normal hours of business. For this reason, only partial air conditioning would be required at certain hours.

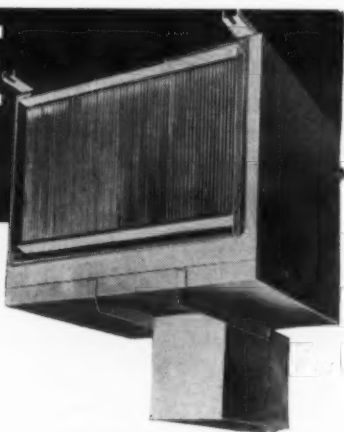
As originally planned, however, a conventional central system with large compressors, condensers and chillers located in a basement machinery room would have necessitated as much as 500 tons of refrigeration operating during the greater part of the year. In addition, chilled-water piping to fan rooms on alternate floors would have been needed throughout the entire building.

Photographs: Courtesy Unit Brothers, and Worthington Pump & Machinery Corp.

EVAPORATIVE CONDENSERS

by **KRAMER**

- Time Tested
- No Rusting
- Trouble-Free Operation



WRITE FOR BULLETIN R-162

2 TO 10 TON CAPACITY

KRAMER TRENTON CO. Trenton 5, N. J.

Small Business Gets Bigger Slice of Defense Contracts

NEW YORK CITY—Small business is playing an increasingly greater role in defense production, it was reported during a conference of small-business specialists at Governors Island.

In terms of defense contract-dollars, small business' share of the total rose from 16.8% in January to 28.3% in April, according to Bernard Jacobson, assistant to the chief of the Controlled Materials Division in the New York Regional Office of the National Production Authority. The trend since April has continued upward, he said.

Major Philip Risik, assistant chief-of-staff, G-4, G.S.U.S.A., pointed out that although many small firms might not be able to get defense contracts individually, defense production pools could be a method for them to achieve participation in both primary contracts and sub-contracts.

Such pools, he explained, can be formed only under emergency authority and with the approval of the Defense Production Authority. Small businesses desiring to set up a defense production pool should obtain adequate legal advice before proceeding with plans, he advised.

Specialists attending the two-day conference were recently appointed to First Army installations as a step in encouraging small-business participation in defense work.

Kalamazoo Appliance Opens

ROCHESTER, N. Y.—A new Kalamazoo appliance store has been opened at 840 N. Clinton Ave. by Herm Walz and Cy Krenzer.

Stop Inflation!

Across-the-Board Retail Excise Tax Promoted by 50 Business Leaders

WASHINGTON, D. C.—Branding the Treasury's proposed manufacturers' excise levy a "discriminatory hodge-podge of taxation," more than 50 business leaders last week appealed to the Senate Finance committee for an "across-the-board defense tax at the retail level, exempting only food, medicine, rent, and traditionally excepted services."

Louis Ruthenburg, board chairman of Servel, Inc., appearing before the Senate committee as head of the National Committee for Fair Emergency Excise Taxation, urged adoption of his group's proposal on the grounds that it would "produce more revenue and would be readily adjustable to changing revenue requirements."

Although the American Retail Federation normally is opposed to all federal excise taxes, Ruthenburg said, that group also has gone on record as favoring the across-the-board retail excise, limited to the emergency. The tax proposed by the National Committee, he said, also would have a "built-in repealer" for automatic cancellation when the emergency is over.

"Calling an excise tax 'selective'—as in the case of present levies—is just a euphemistic way of saying the tax is discriminatory," Ruthenburg told the Senate committee. "But if the tax is imposed at a uniform rate on a broad base, unfairness is eliminated."

"If excises are not across-the-board, if they are put on just a few things, as the Treasury has recommended, they will push the spending away from items that are taxed, onto those that are not taxed."

Instead of stopping inflation, Ruthenburg charged, the Treasury proposal "will just change the course of inflation."

"Should the excise tax be imposed at the manufacturers' level, it will be pyramided, and inflation will increase at every step of the mark-up as the commodity moves through the channels of distribution to the final customer," Ruthenburg told the Senate hearing. "Such a tax inflates the inventory figures and the profit on each transaction. Anyone in the business of manufacturing, wholesaling, or retailing knows that this is the A-B-C of American business."

Ruthenburg, president-elect of the Gas Appliance Manufacturers Association, called attention to an "enigma" in the Treasury position on excises. "Like the NAM (National Association of Manufacturers), the Treasury has recommended manufacturers' taxes—but to be applied selectively rather than uniformly," he said. "Nevertheless, Secretary Snyder has advised the Senate Finance committee that if a general sales tax is enacted, it should be imposed at the retail level, rather than at the manufacturers' level, since taxes on retail products avoid pyramiding due

to retail mark-ups and tend also to have a less disturbing effect on the price ceiling program.

"The defense emergency tax would no more interfere with the state sales taxes than the federal income tax interferes with the state income taxes, which are imposed now in 31 states and the District of Columbia," Ruthenburg asserted.

Leon Henderson, former OPA administrator, is consulting economist for the business group which attended today's hearing.

Los Angeles Offers Civil Service Exams for Heating, Refrigeration Inspectors

LOS ANGELES—Civil service examinations for the posts of heating and refrigeration inspectors have been announced by the city of Los Angeles.

Applications for the examination will be received up to 5 p.m., Sept. 25, by the Civil Service Commission, Room 5, Los Angeles City Hall. California residence is not required of applicants.

The jobs pay from \$319 to \$395 a month. To qualify for the exam applicants must be high school graduates and have four years' practical experience in heating, refrigeration, and ventilation. Engineering education in a recognized college or university, however, may be substituted on a year-for-year basis.

Official announcement states that "candidates may be examined for a good knowledge of the installation and maintenance requirements and practices of a variety of mechanical equipment used for refrigeration, gas-burning warm-air heating, and ventilating purposes; a good knowledge of state laws and municipal ordinances governing the installation of refrigeration, heating, and ventilating equipment; a good knowledge of refrigerants and the hazards involved in their use; a good knowledge of gas combustion and venting problems as related to heating equipment; the ability to recognize hazards and unusual conditions in heating, refrigeration, and ventilating equipment; the ability to read and interpret moderately difficult plans and specifications for heating and refrigerating plants and equipment; the ability to deal tactfully and effectively with the public; the ability to make reports of inspections and to keep records; and such other knowledges, skills, personality traits, and abilities necessary for the position."

JUST ASK US!

Turn to "What's New" Page for useful information on new products.



RANGE DEMONSTRATION featured three different price ranges with the emphasis being placed on the adequacy of the lowest priced one to produce a first class meal.

(Concluded from preceding page)

"At 11 p.m. 'Santa Claus' appeared on a red bicycle, and a drawing for the door prizes was held. Among the prizes given away was a free-standing dishwasher, a Mixmaster, and some lesser prizes, including six cuts of Tenderay steaks and the oven meal prepared by the home economists."

"Compliments for a wonderful evening ran extremely high at the midnight closing. It was truly felt that the under-commercialization of the entire evening's affair was responsible for its huge success. An audience that had anticipated a huge amount of 'Come to Frankel's to buy' had, instead, enjoyed a superb dinner, a short informative program on a product, and dancing and prizes."

"Our success was more than assured when, within 14 days, eight dishwashers were sold to people who attended our dinner. The actual results in goodwill cannot be figured in dollars and cents."

"This was illustrated on the following Monday morning when a woman about 65 entered our store and related the following:

"My son and daughter-in-law had dinner at my home last night and told me about the wonderful time they had at the Women's Club Saturday evening. They asked me if I still wanted to buy a new refrigerator. I said I did and they told me to come down to Frankel's, and so here I am!"

"We sold her a double-door, deluxe refrigerator, at a price of \$439.95."

"Was our promotion a success? You decide for yourself."

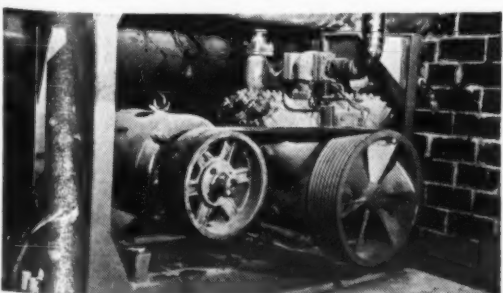
GFLEXIBILITY

is obtained with multiple-unit installation

THE SOLUTION. Study of tenants' requirements and other factors convinced the builders and their consulting engineer, Henry Oehrig, N. Y., that the flexibility of a multiple unit system using machines charged with "Freon" safe refrigerants would satisfactorily meet every requirement. At the same time, a system of this type would reduce initial construction costs and also substantially lower operating expenses.

THE INSTALLATION. The basic job... that of supplying conditioned air to offices throughout the building... was accomplished by installation of "package" units. The system was designed and installed by the Raisler Corp., N. Y., air conditioning contractors.

Two 25-ton Worthington Conditioning Units were placed on each floor from the second to the fifteenth, and two similar 20-ton units on the floors from the sixteenth to the twentieth. It was estimated that these units would be sufficient to cover load requirements based upon 3 watts per sq. ft. and 140 people per floor or one person per 125 sq. ft. of rental area.



View of compact 75-ton Worthington Compressor in basement machine room.

Units were installed in separate rooms with independent exhaust connected to a masonry shaft rising to the roof. A ductwork system distributed conditioned air, and air is returned to the units through louvers in office doors opening into corridors and through plenums formed by hung ceilings in the corridors.

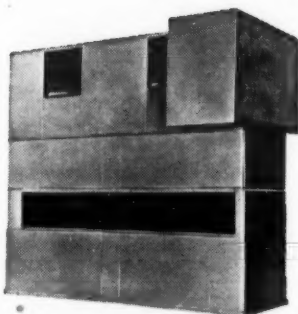
A chilled-water system installed in the basement provides conditioned air for street-floor lobby, a bank with lower-level vault rooms and, in addition, the air conditioning requirements of the 1st, 22nd and 23rd floors.

The system has two 75-ton Worthington Compressors with condensers and chilled-water

pumps (see photo at left). One of these handles air conditioning on the upper floors reached through a shaft extending from basement to roof; the other serves street level and basement.

A tower fan room contains two chilled-water units, each rated at 39 tons to serve the three top floors.

The system can be operated even though one or more of the units may be shut down. Both the builders and air conditioning contractors are convinced that they have hit upon a perfect combination... offering maximum comfort for the tenant and minimum operating cost for the owners.



Typical 25-ton Worthington Air Conditioning "package" unit such as those installed in the "Look" Building.

WHAT'S AHEAD? Plenty of opportunities are ahead in air conditioning. New building and old building owners alike are prospects. Air conditioning today needs little selling. People everywhere are already "sold" on it. In fact, they expect air conditioning... accept it... no longer marvel at its comfort and the better way of life it brings.

That is why it's to your own advantage to uncover prospective users (and buyers) of air conditioning equipment. Take steps now toward developing business for yourself. Plan a campaign of approach. List new and old buildings in your trading area. Talk to owners... write them... phone them. You'll be surprised how easy it often is to get jobs started. And when your prospects spark to the idea... you can be sure you're recommending the best equipment available when you urge selection of any of the excellently built machines charged with "Freon" refrigerants. These refrigerants are safe... nonflammable... nonexplosive and their uniform quality assures the satisfactory operation and long life of the system. "Freon" safe refrigerants also meet all building-code requirements. E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division, Wilmington 98, Delaware.



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BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY



"FREON" SAFE REFRIGERANTS

"Freon" is Du Pont's registered trade-mark for its fluorinated hydrocarbon refrigerants.

PARAGON DEFROSTING TIME SWITCHES

300-M SERIES

From \$19.50 List

FOR COMMERCIAL DEFROSTING — Electric Heat • Hot Gas • Compressor Shut-Down

THE FINEST TIME SWITCH YOU CAN USE

FOR UNIT COOLERS • WALK-IN BOXES FROZEN-FOOD DISPLAY CABINETS LOCKER PLANTS • REACH-IN CABINETS • FUR-STORAGE VAULTS

Paragon 300-M series offers you the finest in accurate, durable, precision-built time switches for all types of commercial defrosting applications where defrost period is two hours or less. Easy-to-set pin-type dial for up to 8 periods per day. Heavy hinged case; unbreakable door glass. Also made in heavy-duty outdoor type, Series 330.

See your jobber or write to:

Paragon ELECTRIC COMPANY

1687 TWELFTH STREET • TWO RIVERS, WISCONSIN

AMERICA'S LARGEST EXCLUSIVE MANUFACTURER OF TIME CONTROLS FOR ALL USES

Makers of the famous "de-frost-it" for domestic refrigerators

Fla. Court Cooling--

(Concluded from Page 1, Column 3)
Some \$38,000 has been appropriated, and air conditioning for the court rooms, judges' conference rooms, and library is now in progress. A well in excess of 300 ft. has been dug on the court house grounds to supply water for the cooling system.

Ducts sufficiently large for the air conditioning of the entire second floor are being installed. It is anticipated that this whole floor, including the office of the clerk of the criminal court and the county commissioners' rooms, will be air conditioned later.

Cy Miller Dies--

(Concluded from Page 1, Column 5)
power system and as manager of the company.

Miller then joined International General Electric Co. as manager of its European and North African refrigeration operations. Returning to this country in 1935, he became vice president and director of H. G. Craig & Co., and in 1941 of Blagden Bros., air conditioning contractors. He was also a design engineer for Noma Electric Corp.

An authority on safe installation and operation of mechanical refrigeration systems, Miller, as executive secretary of Risac, was consulted on safety code problems throughout the country.

He was largely responsible for the wide acceptance of uniform municipal and state safety codes for mechanical refrigeration.

Sanitary's New 6-Cu. Ft. Quickfrez



NATIONAL BUTTER QUEEN, June Bostrom, places a "gold brick" in the new 6-cu. ft. Quickfrez, manufactured by Sanitary Refrigerator Co., Fond du Lac, Wis. Special feature of this model is the light blue handle of the frozen food compartment and outside strip of the chill tray.

Subcontractor Exhibit Dates Set for Detroit, Atlanta

WASHINGTON, D. C.—Dates and places of two forthcoming Armed Forces subcontractor exhibits were announced here. They are: Atlanta, Sept. 10-12; Detroit, Oct. 29 through Nov. 1. The exhibits are designed to enable small businessmen to examine military items which they might make under subcontracts.

Oursler To Head I-H Sales

KANSAS CITY, Mo.—R.C.A. Distributing Co. here, wholesale distributor in the Kansas City area of International Harvester refrigerators and freezers, has announced the appointment of Ralph E. Oursler as manager of I-H refrigeration sales.

Oursler formerly was in the air conditioning and space heater business and, more recently, in the automotive business.

Crosley Line--

(Concluded from Page 1, Column 4)
models and a 20-cu. ft. custom box.

All freezers feature a set of three plastic shelves attached to the underside of the lid that will hold 15 packages of frozen foods. All are equipped with a self-lifting, "floating action" lid that will raise to an 82° angle when a pressure bar in the latch is pushed. Hydraulic cylinders concealed in the hinges cause the lid to rise at a uniform speed regardless of the load in the lid shelves.

An adjustable temperature control, backed by a heavy duty compressor, permits temperatures of -20° F. for rapid freezing if desired. Wrap around coils are used.

Other features common to all models are built-in locks, automatic lights, and recessed toe space.

Custom models have the temperature control and a signal light mounted on the front of the cabinet and four nesting baskets that can be stacked one on top of the other.

An automatic ice cream freezer with paddle type mixer offered as an accessory on one model last year is being made available for all models in the 1952 line. The freezer is said to make a half-gallon of ice cream in 30 to 45 minutes.

The range line includes seven standard size models and two apartment house units. All of the 40-in. ranges have a divided top with surface units on the outside edges and the work surface in the center. Push-button switches are located on the back panel immediately behind the work surface. The number of heat speeds have been raised from five to seven.

Other features in the various models include colored lights in the switches to indicate the various cooking speeds, automatic pre-heat for baking which shuts off when the required temperature is reached, and a high heat unit in the deep well cooker for deep-fat frying.

The top model in the line is equipped with two ovens. One of the ovens has a Visidor window so that the progress of baking inside can be watched. Each oven has separate baking and broiling units with individual thermostats for each. A "hasty heat" surface unit is said to heat a pint of water in four minutes.

In another model, a warming oven replaces the second cooking oven. This oven will reach 140° F.

No prices on either the freezer or range line were announced.

Cool Congressmen--

(Concluded from Page 1, Column 4)
mid summer. They didn't trust their own tempers, nor those of other fellows.

"Air conditioning has changed that. The Capitol buildings have become about the pleasantest places in town. The compelling reason for the traditional summer recess has vanished, and I think members of Congress are working out a new way of life.

"Legislation is a process of reaching agreement at the last possible moment. The onset of summer weather formerly created such a 'last possible moment' in June of most years.

"It is surprising how much Government machinery was built around that summer holiday. The whole system of annual appropriations was arranged with the expectation of passage of money bills during late June.

"Now it has become semi-routine to extend last year's appropriations past the beginning of the new fiscal year July 1, and to postpone new agreements.

"My hunch is this may lead to more appropriations which don't need annual renewal. And in other instances the lawmakers may go to a two-year, or life-of-a-Congress appropriation."

RSES Plans--

(Concluded from Page 1, Column 2)
ford of Detroit Lubricator, publicity; Al Delheim, Illinois RSES state secretary, auxiliary coordinator; Warren Chesbro and Wesley Donalski, program; R. C. Marquis of St. Charles, Ill., registration; and Ralph Porter of Bloomington, Ill., who is also president of the Illinois state association, reception.

Annual banquet for the convention will be held Sunday night, Nov. 4, on the eve of the opening of the All-Industry Show. This will be the only major social event of the entire convention and show, points out Orr, the entertainment chairman.

A complete floor show is planned, one of the outstanding events programmed being an appearance of the Kraft Cheese Co. Choral Group, which has made several radio and TV appearances with top-flight entertainers.

Initial steps for publicizing the convention have already been taken, it was reported by Stafford when the committee on arrangements held its first meeting in Chicago recently. Envelope stuffers for industry mailing have gone out, and posters for wholesalers' stores are being prepared, he said.

it's brand new

...and profitable too!

BTC GLASS FRONT display case



Here's the case that's sure to send your profit picture soaring—it's the handsome new BTC Glass-Front Cabinet. And it's designed to display more and sell more!

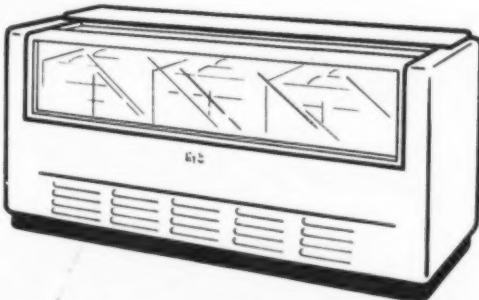
FLUORESCENT-LIGHTED INTERIOR shows off foods stored within — holds a full 10 cubic feet in only 53" x 30" floor space!

EXCLUSIVE "HIDE-A-WAY" LID is self-contained, fully insulated — slides under rear deck when cabinet is opened!

AND ALL THESE BTC FEATURES
Quadruple Thermopane glass front — 4 compartments—full-color, 3-dimensional picture — gleaming white enamel finish — all-steel bonderized cabinet—½ H.P. hermetic compressor — vapor-sealed insulation — lateral plate evaporators — plus 5-year compressor warranty.

WRITE BREWER-TITCHENER TODAY and learn the full story on this profitable new frozen food cabinet! Ask for Glass-Front Display Case Bulletin.

MODEL SS-5310-D with superstructure. Also available without superstructure.



SMART-LOOKING 16 Cubic Foot Display Case. Model DC-16. With or without superstructure.

DISPLAY **BTC** CASES
The BREWER-TITCHENER Corporation
BINGHAMTON • NEW YORK

Frigidaire Prices--

(Concluded from Page 1, Column 3)
to \$20 on a \$364.75 model. Increases in water heater prices ranged from 75 cents to \$6.

There was also an adjustment on commercial refrigeration equipment prices with the exception of ice cream cabinets, beverage coolers, and certain compressor models.

The price adjustments were made under the provisions of OPS Manufacturer's Price Regulation 22.

Both the new and old appliance prices are as follows:

Ranges	New Price	Old Price
RM-3	\$166.85	\$162.75
RM-4	177.65	169.75
RO-30	183.50	178.75
RO-35	222.75	214.75
RO-10	225.00	219.75
RO-20	271.75	263.75
RO-40	308.75	295.75
RO-50	344.00	337.75
RO-60	384.75	364.75
RO-70	397.50	389.75
Washer		
WO-65	302.25	304.75
Dehumidifier		
BO-1	142.00	131.75
Air Conditioners		
ARO-50	321.75	329.75
ARO-100	460.75	469.75
Water Heaters		
28 models	114.00 to 207.75	109.75 to 204.75

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CROSS-FLO
Drift Filters
Eliminate all losses from breakdowns—highest efficiency even at liquid temperatures up to 150°.

E-Z-SEE
Liquid Indicators Eliminate losses from leaking liquid indicators. E-Z to see through, leakproof, perfectly safe.

FROST-TITE
Flare Nuts Eliminate losses from loosened and cracked flare nuts. Ideal for use anywhere in system.

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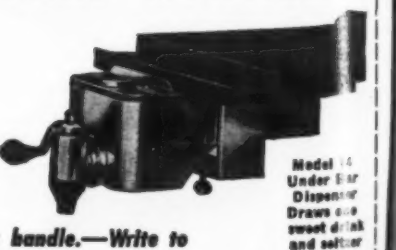
DEALERS - DISTRIBUTORS WANTED

If you are prepared to handle sales, installation and service for our stainless steel soft drink dispensers for Bars and Taverns, advise business experience and some facts relative to your financial ability.

INCREASES PROFITS FOR BARS AND TAVERNS

Exceptionally profitable to handle.—Write to

MULTIPLEX FAUCET CO. 4326 DUNCAN, Dept. ARN-14, ST. LOUIS, MO.
—MANUFACTURERS OF SOFT DRINK DISPENSERS OVER 45 YEARS—



Overnight Demonstration Plan Sells Window Type Units for Biloxi Dealer



THESE TWO window type room units and three others keep the Allen Electric Co. dealership in Biloxi, Miss. at 80° F. or less and help convince air conditioning prospects that window units will keep their bedrooms cool on hot nights.

BILOXI, Miss.—Cooling his own store with a combination of five window type air conditioners, and offering interested prospects an overnight demonstration in their bedrooms, is selling a profitable volume of package conditioners for Allen Electric Co. here.

Although Allen Electric Co. has carried package coolers since before World War II, it has been only during the past two seasons that the "homeowner market" has burgeoned out, according to L. F. Allen, head of the firm.

The firm, which carries Mitchell and Fedders room coolers, got its start by selling the professional men, cooling many offices of doctors, dentists, and lawyers, in the gulf coast resort city.

Upon enjoying cool working conditions, they were the first to install similar units in their own homes, and many other homeowners have followed suit.

In order to impress homeowners instantly with the cooling capacity of the small units, Allen air conditioned his entire store on downtown Howard St., by means of five room units.

One is located in the transom over the main entrance, three across the rear wall, and the other, across the left wall. Each has a duct cut through the brickwork for outside air.

In combination, they can keep the store at 80° F. or less. As the sun on building shifts, or the heatload otherwise dissipates, Allen can switch on or turn off any unit as needed.

"Most of our entering customers are amazed to find that such small coolers can adequately cool a large store," he said. "This often forms the opening wedge toward a home sale."

For the interested prospect who considers air conditioning in his home, Allen has worked out a simple demonstration plan. The prospect may ask for "overnight demonstration" whereupon a unit is dispatched either in a pickup truck or passenger automobile to the home before store-closing time.

Allen has worked out a simple installation kit, which consists of clamp-on guides for window sill, a variety of simple wooden braces, fur felt, and plywood for furring in the unit.

He insists that it be installed before 5 o'clock in the afternoon, to give it plenty of time to pull down the near 100° F., 98% relative humidity air.

The air conditioner cools the bedroom overnight, and in the morning, an Allen salesman is there to sign up the contract, or take the unit back.

To date, with scores of such demonstrations staged, not one single unit has ever been returned, according to the Biloxi dealer.

During the summer months, such demonstrations are carried out almost nightly. Sometimes a single demonstration of this type will result in the sale of four or five package units for a single home, according to Allen.

The Mississippi dealer likewise keeps up a complex file of "testimonial letters," which cover almost every aspect of air conditioning service, and which can be pulled out to convince dubious prospects that the small window unit can do an adequate job, despite the torrid exterior temperature.

40-Ton Governair System Cools Lakeland Theater

LAKE LAND, Fla.—A 40-ton air conditioning system has been installed in the Lake theater here, giving patrons the same comfort to be found at Florida State Theaters' two other movie houses here—the Polk and the Palace.

The Governair unit was installed on the second floor level of the Lake, immediately to the right of the upper portion of the stage.

The automatic system forces the filtered, cooled air through a louvered opening arranged above the screen and to the right. As the air leaves the opening it flows somewhat diagonally across the front near the stage, moves toward the entrance of the theater, and then is drawn by the unit's suction fans back toward the front.

Removal of part of the north end of the building was necessary in order to get the unit inside and anchored on a steel beam foundation. A mobile crane was used in order to hoist the unit.

Japan's Antibiotic Drug Industry Offers New, Growing Market for Electric Air Filtering Units

McKEES ROCKS, Pa.—Yoshizo Kondoh, recognized authority on air handling equipment throughout Japan, speaking at a recent sales meeting at Trion, Inc., here, stated that there is a great future for electric air filtering equipment in his country because of the tremendous growth in the field of antibiotic drugs now in progress.

With the present extensive research and development and planned future expansion, Japan is hopeful of becoming a world leader in this field. He further stated that the rapid strides made thus far were the direct result of rigid conditions of sanitation and sterilization employed by the companies making these miracle drugs.

Kondoh stressed the importance placed on ventilating these processing labs with completely pure, bacteria-free electrically filtered air.

All major pharmaceutical houses throughout Japan are now equipped

with Trion electric air filters for the removal of submicroscopic particles of dust, dirt, soot, and pollen from the area according to Kondoh.

Major applications for this filtered air are in ampoule filling and sealing rooms, testing labs, and processing rooms where streptomycin, aureomycin and other antibiotic drugs are prepared.

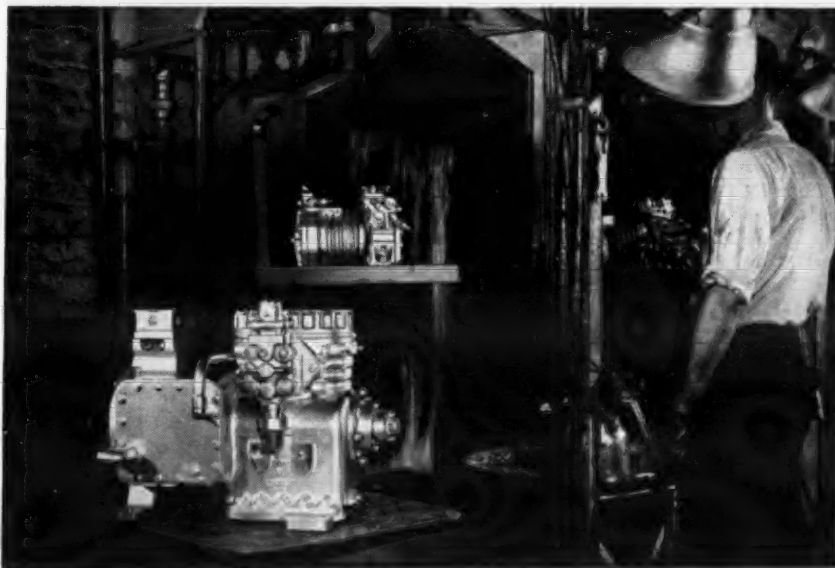
Kondoh, a merchant engineer, is president and owner of the Nippon Air Conditioners, Inc., one of the largest air handling companies in Japan. He pioneered air conditioning throughout Japan and has recently been appointed a representative by Trion in the Far East.

'Dixie Home' Air Conditioned

AUGUSTA, Ga.—This city's new "Dixie Home" Super Market, just completed at a cost of approximately \$300,000, is completely air conditioned.



MORE THAN 1,000,000 COMPRESSORS have been charged with Suniso in the past 15 years by Copeland Refrigeration, one of the oldest manufacturers in the industry. From drums stored over the charging board, Suniso is fed into glass tubes which hold the correct amount of oil for each type of compressor coming down the line.



1,500 COMPRESSORS varying in size from ¼ hp to 7½ hp are assembled daily and charged with Suniso Oil. Shown here after final assembly at the paint booth are the smallest and largest units made—a ¼ hp hermetic designed for a domestic refrigerator and a 7½ hp suitable for large air-conditioning and refrigeration units.

80,000-HOUR TEST PROVES THE VALUE OF SUNISO OIL

Copeland Refrigeration, a pioneer in the manufacture of compressors, and an exclusive user of Suniso Refrigeration Oils for the past 15 years, recently completed a 10-year test of two models. These units had been run day and night on Suniso for approximately 80,000 hours—stopped only to be torn down at the end of the first, second and fourth years. In the words of the test engineer, the final results were: "The cylinders and the connecting rod bearings were so nearly perfect we couldn't even measure the wear in ten-thousandths of an inch. The pistons still showed the original ground surface. The valves were as clean as new and there was no evidence of gum or sludge."

For a free copy of the illustrated booklet "Suniso Refrigeration Oils," write on your business letterhead to Department RN-8.



SUNISO HAS A RECORD for unflinching protection of precision parts in Copeland compressors, such as these hermetics on the assembly line. After a 10-year test in which two compressors were run approximately 80,000 hours on Suniso, all cylinders, connecting rod bearings, pistons and valves were as good as new, and no gum or sludge had formed.

SUNISO REFRIGERATION OILS

SUN OIL COMPANY, PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO AND MONTREAL



INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

apolis, St. Louis, and Chicago in search of excitement; but in general people entertain themselves wholesomely and soul-satisfyingly at home.

Two or three bridge clubs meet regularly. Similar women's groups get together to stitch doilies and talk about the vagaries of husbands and the bright sayings of children. Men's service clubs do a great deal of good. Ole Swimmin' Hole is handy. So are hills and ponds for bobsledding, skating, and "shinny."

It's a great place for children, and many of the activities center around them.

Aged-In-the-Wood Respectability

Marshall is a small edition of Boston, minus the snoot. As one of the oldest municipalities in Illinois—established much earlier than Chicago—it has the patina of antiquity. Venerable great-grandchildren of the original settlers can tell you glamorous stories of its past. Tradition lingers on every corner, and underneath the majestic roofings of stately old trees. The latter remind romantic travelers of European cathedral naves.

Like their ancestors, Marshall folk

love their calm, secure lives, and wouldn't trade places with any group they've read about, or witnessed on movie or television screens. Their forebears played important roles in the building of Illinois; and on the proud shoulders of present citizens rests a tranquil tradition which is not easily disturbed.

Aristocracy is a family affair nearly everywhere. In Marshall, however, most folk seem related to someone else in the vicinity. Newcomers arrive, are quickly absorbed, and see their children married into the tribe. Of course, a few outlanders never quite "belong." No one can tell you why unless it's the unwillingness to acquire the protective coloration of their environment.

Befitting Marshall's air of royal repose, the aforementioned regiments of magnificent trees march down the avenues in double and sometimes quadruple file. Rarely will you see anything like those noble arboreal archways, anywhere else you may go. They provide a clue to the town's splendid serenity.

Streets are wide, unusually so, and significantly they are named for trees—Beech, Elm, Maple, etc. Houses are set well back, leaving handsome areas of front yard. Scattered 'round about are individual oaks, poplars, pines, and a few sycamores—nearly all gargantuan.

Spring and summer in Marshall are cooled by oceans of shade. Fall is embellished by oceans of leaves. And in winter the ice-encrusted branches glitter like fairy-tale clouds of diamonds.

Joyce Kilmer should have lived in Marshall before (and after) he versified about "Trees."

Outlets for Proper Emotions

Two home-town institutions give a rising bounce to local enthusiasm and partisanship. They are the brass band and the high school athletic teams. All winter long "the band" practices for its Thursday night summer concerts, which are competent, well balanced, and immensely popular.

Repertoire of the local musicians ranges from Wagner, Brahms, and Tchaikowsky to Sousa, K. L. King, and Cole Porter (who grew up nearby). Everybody seems satisfied with the selections. During these concerts the public square is barricaded and "through" traffic is detoured. Adult listeners stay in their autos—parked four deep—and happy children swarm all over the capacious courthouse yard. Courtin' is permissible, but a mite dangerous. With so many witnesses on hand, engagements are taken for granted sometimes when a feller just thought he was having a little innocent fun.

Drugstores and confectioneries are packed with patrons clamoring for ice cream cones, locally bottled soft drinks, and "tin roof" sundaes (two scoops of ice cream, chocolate syrup, and a handful of peanuts). Taverns do less well on band concert nights.

Sometimes the band visits nearby towns to parade, to play at a "fair," or to embellish a social event.

Amateur musicianship is a local tradition—and a perpetually indigenous responsibility. Children who aren't forced to take music lessons are exceptions to a local rule. That situation isn't so grim as it sounds, though. Neighborhood choirs, orchestras, dance combos, and Barber Shop quartettes have a lot of fun.

Seasonally the township high school provides interesting football and basketball games, class plays, debates, and other opportunities for everybody to be proud of local boys and girls. Athletic contests are anticipated and post-mortemed for weeks and months and years.

High school football games are the biggest events, bar nothing. Occasionally the local squad "cleans up on" schools with enrollments greater than the entire population of Marshall. Celebrations of no mean consequence follow.

'It Says In the Paper'

Editors of metropolitan newspapers (Chicago, St. Louis, Indianapolis) would be highly flattered if they could realize how much they influence Marshall's thinking and talking. On street corners, in stores, at civic club luncheons, in homes and front yards—even in church—conversation stems from and is generated by front pages and editorials.

Murders, love-nests, and dope rings interest Marshallites less than the maneuverings of politicians and statesmen, the random utterances of celebrities, and happenings in sports-dom.

Foreign relations, economic complications, state and national politics... Hey, stranger! You wanna argue?

Sports, like politics, are daily bread and meat. The World's Series, batting averages, championship prize fights, and Big Ten football games are more real and earnest than personal crises in private lives.

Wags and pundits follow the doings of Washington and Springfield closely, and there's a Will Rogers and a Walter Lippmann on every block.

Peaceful People

Crime is practically unknown in Marshall. Great-grandmothers still "go on" about the time somebody shot a Gallagher cold stone daid for making love to the wrong woman. That was back in 1898, or was it 1889?

Nobody robs anybody, and the kids don't break windows—intentionally. Front doors are left unlocked. The city's police force used to consist of one antediluvian constable, who usually was chosen for the job because he was too old and tired to do anything else, and they had to take care of him, didn't they?

One incumbent told us that in 14 years he had only one real problem. This happened when two responsible citizens almost came to blows in front of a highly respectable tavern. A crowd gathered from nowhere. The constable seen his duty and he done it. He juggled 'em both—until the Justice of the Peace could be routed

out of bed. Arriving at the City Hall (which is also the Police Dept., the Fire Dept., and the Public Library) Judge Blank confronted the two arguers. Neither would speak.

"Constable," demanded the local arbiter of peace, "what wuz they a-sayin' to each other at the time of the argiment?"

"Can't rightfully remember; except that there was a lot of loud talk, and each gennelmun was a-callin' t'other what he honestly is."

The two gentlemen laughed delightedly, shook hands all around and the feud—which could have had serious repercussions—died right there.

Life in Marshall is as expansive as the entire world brought in by newspapers and the radio. At the same time it is circumscribed as the closed circle of a mutually devoted family.

Fights are rare. Bitter antagonism of any description is absent. Stakes aren't high; competition is pleasant. Citizens accept and like one another as a matter of custom and habit.

Those who live there taste life lingeringly and lovingly. They chew facts ruminatively and aren't so inclined to swallow slogans or propaganda as their city cousins. They look for the substance under the paint, and the dross beneath the gloss.

Peaceful, kindly, loyal, watchful, conservative, proud, and happy are the residents of this AMERICAN principality.

And, Man! Do they like it there! We do, too; and so would you.

Marshall Sires 'Characters'

One of the grandest fellows we've ever known is "Whitey" Routledge, who farms five days a week and tends bar at the American Legion hall on Saturday nights. In high school the writer teamed up with "Whitey" during memorable football games, and has loved him like a brother ever since.

As of our last visit to Marshall, friend Routledge was still a bachelor. He believes in making money and saving it; and he's heard that women spend it. For that reason he is no encourager of romance, either for himself or farm-hands who work for him.

One swain tried to borrow an electric lantern from "Whitey" to find his way to a girl's home which was three miles down an obscure country lane.

"You're a sissy," thundered Routledge. "When my father went a-courtin' he didn't need a lantern. Whassmore, he married and raised boys."

"Yeah?" bridled the hired man. "Look what he got."

Marshall's Johnnie Fredenberger (a fine basketball player in his day) motored to Michigan for a vacation, and paused to visit the writer in Grosse Pointe—where he ignored the parking meters. Johnnie drew up alongside a drugstore to phone for directions. When he came out a policeman was standing near his car.

"Don't you know you're supposed to put a nickel in this thing?" the copper expostulated.

Johnnie feigned his best hayseed expression.

"Down whuh I cum from," he drawled, "we-uns ud call that a hit-chin' post."

No ticket.

Memories of a Wonderful Town

During his tenure as President of the United States, Martin Van Buren vetoed a bill to repair the National Old Trail. This transcontinental highway runs through Marshall, and has bisected the United States since Andrew Jackson's time.

Voters in the vicinity of Marshall resolved to teach Van Buren a lesson.

Some time later (the spring of 1842) he swung through the Midwest on a campaign tour. From Indianapolis he journeyed to Vandalia via the National Old Trail, and was bumped around severely on the rough surfaces of this unrepaired highway.

Having heard that Van Buren was a dandified dresser, Clark county patriots arranged that a notorious mud-hole on this route be made mud-dier. The president's stage-coach driver, some say, was in on the plot.

Anyway, the clothes-conscious Van Buren was a sorry sight after the stage-coach overturned. By chance

(?) a goodly crowd was on hand to witness this lesson in practical politics.

Aside from resident Ohio Oil Co. tycoons, banker Harry Dulaney was the richest man in Marshall amidst the Turbulent Twenties. Toward the twilight of his career he found it convenient to be slightly deaf.

Hardwareman Dixon applied for a \$1,000 loan to carry an inventory of Kelvinators into the summer selling season.

"How's that again?" rejoined banker Dulaney. "Speak louder, please... and you'd better reduce the amount, too."

Big Wind

Tornadoes are rarer in southern Illinois than, say, in Kansas—but not unknown.

A stranger appeared in Marshall soon after a damaging "twister" had swathed nearby; and realtor Jim Hollenbeck noticed that the newcomer was examining all the homes on Fifth and Sixth Streets.

"Pardon me, sir," Jim approached him amiably. "Are you looking for a house?"

"Sure am. Two-story frame with five gables. Did it blow this way?"

Two days after a tornado swished down and swatted through Clark and Coles counties, a Chicago reporter fended his way down there—holding his nose all the while. He interviewed merchants, preachers, and clubwomen "to get the local angle" on the devastating phenomenon of nature.

Next he sought, and was directed toward, a "typical farmer." The latter (a University of Illinois man, an independent cattleman and respected member of the state legislature) resented the City Feller's uppity interrogation. So he pulled the reporter's leg.

"Yup, turrible thing, that Twister," dialected John Lewis, Jr. "Turned my barn inside out it did. And one o' my horses was blown clean out o' the state. Feller who found that horse entered him in the Kentucky Derby. Won it, too, as a matter of fact."

No doubt this yarn was conceived in a bar-and-grille on a Saturday night, but it deserves recording.

"Jot" Malloy, the poultry king of Marshall, swore that a tornado whirled his prize hen around so frequently and rapidly that Old Biddy laid the same egg three times.

Political Notes

In recent years government farm advisers have moved into Marshall to give unwanted advice. Combing the countryside for innocents who might welcome their attentions, they met a widow who was raising Plymouth Rock chickens.

To their horror they spied a Rhode Island Red rooster in her flock.

"Lady," they panted, "that rooster will spoil the pure-bred strain of your hens."

"Oh, no he won't," she deflated. "I take him away from the roost every night."

Farmers in southern Illinois don't take kindly to regimentation, and are skeptical about "gumvint men." They're decent people, though, and will give any new scheme a fair and patient hearing.

To a courthouse came an agent of the U. S. Agricultural Adjustment Administration. His mission was to explain the Brannan plan. Head of the local Farm Bureau called a meeting and introduced the speaker.

"Friends," he began skeptically, "in the Bible it tells about Satan taking Jesus up to the top of a mountain and showing Him wide stretches of beautiful land. The Devil offered a million acres to Our Lord if He'd do what the Devil wanted. And y'know, Satan didn't own a single acre of it!... I now present our distinguished guest from Washington."

"Collect all your livestock on one place," ordered another Department of Agriculture pooh-bah during Henry Wallace's time. "Brand every living thing you own. Then I can tell if you're obeying the law or not."

"Hardly seems worth while," objected cousin Rob Prewett, drily. "How can I tag my bees?"



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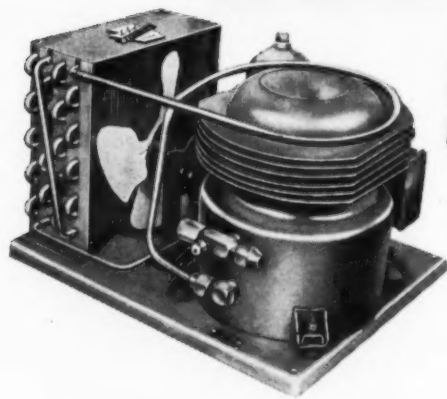
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Egg Refrigeration = \$\$\$

Deterioration Reduced by Immediate Elimination of Animal Heat and Continued Cooling Right on the Farm, Poultry Producers Assn. Finds

SAN FRANCISCO—"There is a growing appreciation among all of the egg industry that refrigeration right from the ranch to the consumer is important," declares L. N. Thompson, who manages the egg department of the world's largest egg marketing cooperative—Poultry Producers of Central California.

There has been considerable development in the recognition that the temperature of an egg when laid is 104° F., and that as we know it is an enemy to good egg quality, it is just as important to remove quickly the animal heat from the egg as it is to keep the surrounding temperature cool.

We also know," Thompson explains, "that the rate of deterioration in egg quality is most rapid in the first 48 hours after lay. It therefore follows that the quicker the egg can be cooled after being laid, the greater the chance for retarding the deterioration factor."

A temperature of 55° F. with 75% relative humidity is recommended by the Agricultural Experimentation Station of the University of California, according to Thompson, who adds, "it is important for good egg quality, of course, to avoid dehydration."

"We air condition all of our egg rooms in the warm weather areas and all of our eggs are picked up in insulated and refrigerated trucks, either ice cooled or mechanically refrigerated."

Further data on farm refrigeration of eggs has also been obtained from the University of California by the Poultry Producers co-op and published in its *Nulaid News*.

This points out that refrigeration on the farm not only removes animal heat from eggs to preserve their original quality but "also provides cool packing materials into which the eggs are packed, and protects the packed eggs while awaiting removal from the ranch."

"An increasing number of producers have found farm egg refrigeration provides dollars and cents benefits to them by increasing their returns for higher quality egg deliveries."

A table prepared by the university and published by the cooperative is intended to show farm owners the capacity of equipment and size of coolers needed for refrigerating eggs laid by various sizes of flocks.

"This table," states the cooperative, "assumes 60% average production from the laying flock. It provides for 55° F. holding room temperature and a relative humidity of at least 75%. Adequate humidity is important; therefore it is important to remember that to achieve proper temperature-humidity relationship, especially to keep humidity high enough to prevent dehydration, the installation

should provide:

"(1) that there is adequate capacity of the evaporator;

"(2) that there is adequate capacity of the refrigerator coils.

"The coil temperature and the room air temperature should be as nearly as possible the same. Underpowered refrigeration equipment will not adequately provide for sufficient humidity.

"The room size and the refrigeration equipment shown in the table are designed for maximum capacities and for refrigeration only of baskets of eggs, cases of packed eggs, and empty cases including fillers and flats, all to handle the production indicated."

For example, the table indicates that if the size of the flock includes

1,000 layers, the load will be 1,800 B.t.u. an hour, which can be handled by a 1/4-hp. unit. Inside dimensions of the cooler room (if eggs are picked up twice weekly) should be 3 by 2 1/2 by 7 ft. This room will have a capacity of seven cases with twice-weekly pickup, or five cases with pickup three times a week and will cool four baskets of 144 eggs each a day.

If the laying flock numbers 10,000, then a cooler room of 8 by 9 by 7 ft. with a 1 1/2-hp. system is recommended.

Importance of maintaining proper humidity conditions as well as refrigeration is also stressed by the California cooperative in a report of studies by a similar group in Wooster, Ohio. There humidity records

Cooling Requirements for Egg Farmers

Size of Flock—Layers	Room storage capacity in cases—No. determined by pickups per week as indicated		No. of baskets cooled per day (basket size 144 eggs each)	B.t.u. per hour	Hp. Motor	Room size, (inside dimensions), twice weekly pickup
	Twice weekly	3-times weekly				
1,000	7	5	4	1,800	1/4	3'x2 1/2'x7'
2,000	13	10	8	2,800	1/4	5'x2 1/2'x7'
3,000	20	15	13	4,070	1/2	5'x6'x7'
4,000	27	20	17	5,300	1/2	6'x7'x7'
5,000	33	25	21	6,600	3/4	7'x7'x7'
6,000	40	30	25	7,430	3/4	7'x8'x7'
7,000	47	35	29	8,710	3/4	8'x8'x7'
8,000	53	40	33	10,000	1	8'x9'x7'
9,000	60	45	37	11,000	1 or 1 1/2	8'x9'x7'
10,000	66	50	42	12,000	1 1/2	8'x9'x7'

were kept in the egg rooms of 100 producers.

"Early last year when the egg market was in the doldrums, the prices received by these 100 producers for one week were analyzed. The 17 farmers who had the lowest average humidity reading received 31.3 cents a dozen or 2 cents a dozen less for their eggs than the 38 producers who had high humidity readings. They received 1 cent a dozen less than the 45 producers who had about average

humidity readings in their egg rooms.

"Inasmuch as the 17 producers with unfavorable moisture conditions in their egg rooms delivered an average of 90 dozen eggs during the week of the test, the financial importance of moisture in the egg room can be visualized. Obviously," states the cooperative, "it becomes a much greater factor during hot, dry summer months when egg prices are higher and the premiums paid for quality are greater."

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Smoked, Cured, and Table-Ready Meats

27° Storage, Display Temperature and Proper Packaging Will Reduce Shrinkage, Deterioration, Swift & Co. Says

CHICAGO—"Contrary to the opinion of many operators, smoked, cured, and table-ready meats present the same problems of keeping quality and deterioration common to fresh meats.

"Despite this obvious fact, such meats quite often are held at higher temperatures than those used for fresh meats, which is a faulty practice. . . . It is suggested that cooler and display case temperatures of 27° F. be used for all types of cured, smoked, and table-ready meats to reduce both shrinkage and deterioration."

This suggestion was presented to market operators at the 14th annual convention of the Super Market Institute here by George T. Carlin, of Swift & Co.'s research laboratories in a discussion devoted to pre-packaged meat.

Over-exposure to either light or oxygen likewise is to be avoided, for this accelerates discoloration—"the most important single problem connected with the marketing of cured, smoked, and table-ready meat items in the display cases," according to Carlin.

As with pre-packaged fresh meats, proper packaging, sanitation, refrigeration, and quick turnover are required in addition to controlled lighting to effectively minimize shrinkage, deterioration, and discoloration

in cured, smoked, and table-ready meats, Carlin indicated.

Although the problems are similar, "certain cured and table-ready meats differ greatly in structure from fresh meats. The fat of table-ready meat items has been disposed of by comminution. This is also true of bologna and this presents a problem because the fat absorption from table-ready meats into the packaging board will often cause rancid odors and other objectionable flavors.

"It is, therefore, essential that greaseproof packaging materials be used when handling these products. This is especially true of bacon. Now, it is obvious the more surface exposed to packaging boards the greater will be the problem, but marketing of these items causes much of the difficulty because of the need for visibility, and the need for more attractive displays.

"The slicing of these meats into extremely thin slices and exposing large surface areas to oxygen contributes to rapid deterioration. It seems that there is a race between various self-service operators to see which one can expose the largest amount of surface to the atmosphere. Bacon packages have become larger and larger by extra thin slicing and very poor shingling.

"These methods not only result in more rapid deterioration of finished product but increase packaging costs

considerably. The same situation exists with shingled table-ready meats—the thinner you slice them and the wider they are shingled the more rapid will be their deterioration. It must be recognized that the thinly sliced form in which these meats are sold has become a characteristic which dominates all of our problems," Carlin said.

"Another characteristic difference is the need for using different packaging materials.

"You need gas-permeable films when packaging fresh meat. In the case of fresh meat oxygen combination with the meat pigment is desirable if a bright color is to be secured. But in the case of cured meats, the bright color has already been obtained by curing. Oxidation of cured meats will result in the formation of brown and grey and very unsightly colors."

In analyzing the three basic problems—shrinkage, deterioration, and discoloration—he indicated that "long time exposure to dry atmospheres will quickly dehydrate these table-ready meats, and smoked meats even more quickly than will be found the case with fresh items. Heavy shrinkage is often the result of this drying out. Widely spaced shingling increases shrinkage.

"A study conducted in a large supermarket indicated a loss of nearly one per cent per day per

pound of bologna brought about by moisture transfer through a moisture permeable film used for the packaging of bologna. For this reason the use of moistureproof films seems to be almost mandatory when displaying certain sliced table-ready meats and even such smoked items as picnics, daisies, ham slices, etc.

"But one must not plunge blindly overboard in the struggle to avoid shrinkage through the use of moisture impermeable films. Unfortunately these films will magnify problems with keeping quality of smoked, cured, and table-ready meats unless turnover of two or three days can be achieved. We can easily jump from the frying pan of shrinkage into the fire of deterioration.

"There is a second shrink taking place in the slicing room through improper weighing. This shrink can become extremely high, particularly when packaging small weight units. (Just one quarter of an ounce on 6 ozs. is 5% shrink.) Unusually high losses can easily be developed through careless slicing and packaging of table-ready meat items. I shall not dwell on reduction of shrinkage through more efficient supervision of the packaging room. This is a problem only you can control unless the table-ready meats are purchased in pre-packaged form from the meat packer.

Table 1—Shrinkage Due to Temperature

	27° F.	40° F.
Smoked Ham Slices . . .	1.4%	2.3%
Bologna Slices (1/2 lb.) . . .	1.0	3.8
Frankfurters (1 lb.) . . .	0.6	2.2

"Table 1 indicates the importance of low storage temperatures with respect to shrinkage control. In this table you will see compared smoked ham slices, bologna slices, and frankfurters. These products were pre-packaged and then stored two weeks at 27° and 40° F. You will note that the shrinkage at 40° was more than three times that at 27° F. The importance of low storage temperatures cannot be overly emphasized as a means of minimizing shrinkage.

"The freezing point of fresh meat lies somewhere in the range of 29° to 30° F., and it is recommended that 30° to 34° F. be used as the temperature of the cooler and 30° temperature for display cases. The freezing point of cured and table-ready meats is quite low when compared with that of fresh meats. Cured meat items will not freeze until they reach temperatures as low as 20° to 25° F.

"For this reason it is suggested that cooler and display case temperatures of 27° F. be used for all types of cured, smoked, and table-ready meats to reduce both shrink and deterioration.

Table 2—Smoked Ham Slices Stored at 27° F. and 40° F.

	Temp.	Start	2 Weeks
Bacteria Count . . .	27°	400	5,200
	40°	400	1,900,000
Appearance	27°	Exc.	Good
	40°	Exc.	Fair
Flavor	27°	Exc.	Good
	40°	Exc.	Poor to Fair

"Table 2 shows a quality comparison of packaged smoked ham sliced wrapped in semi-moistureproof film and held at 27° F. and 40° F. These ham slices were held for two weeks but were not exposed to light. It will be noted that the quality change in appearance and flavor of those slices

held at 27° F. was not great. The change in appearance and flavor of the 40° sample was sufficient to cause dissatisfaction on the part of customers.

"We cannot overemphasize the importance of low temperature holding of cured and table-ready meat items. Some of you have solved this problem by displaying table-ready meats and smoked meats in a separate case in which you maintain lower temperatures.

"The ham slices in this comparison would have deteriorated more rapidly—especially those held at 40° F. if a completely moistureproof film had been used. Conditions of high humidity exist at the point of contact between the moisture impermeable film and the packaged meat. This extra humidity will so stimulate the growth of certain molds and bacteria that storage problems will be produced. Speed is, therefore, paramount when packaging in moisture-proof films. Low temperature storage is also essential," Carlin emphasized.

"Still another problem associated with cured, smoked, and table-ready meats is fat deterioration. Again this problem is more serious than in fresh meat, and is created by exposure of large surface areas to paper wrappers, to oxygen, and light. Not only do we have a surface problem on the meat itself; we also have a problem of fat soakage into the packaging materials.

"When fats are dispersed through the paper the resulting blotter effect causes more serious problems with fat stability than exists on the surface of the meat. Often the grease soaked packaging boards or paper will become rancid and will impart rancid odors to the contents of the package. Special greaseproof boards are obtainable and should be used in the packaging of fatty foods of all types. Greaseproof papers and films are also essential.

"The most important single problem connected with the marketing of cured, smoked, and table-ready meat items in the display cases is the problem of discoloration. To fully appreciate the problem we must know its cause. Discoloration occurs when some of the natural pigment in the product combines with the oxygen of the air. This combination is known as oxidation.

"Not only does the oxygen of the air cause change but the change is accelerated or catalyzed when the product is exposed to air in the presence of light. Bacon, ham, bologna, and nearly all table-ready meat items are made quickly unsalable through oxidation if the meat is exposed to air and light simultaneously.

"Light is perhaps the most important of the two factors. Intense light will so stimulate oxidation that the bloom of the freshly sliced product will be lost within a period of one hour. On the other hand if the light is not very intense the fresh appearing bloom can be retained for at least one half day.

"If products are not moving, light exposure must be blocked entirely, either by stacking products on edge or by turning them over with opaque board resting on top of the display to block all light.

"Sixty foot-candles of light, by the way, is approximately the average lighting condition encountered in supermarket display cases. Sometimes light intensity is greater than 60 foot-candles, which, of course, is a very poor practice. We favor the (Concluded on next page)

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Displaying Smoked, Table-Ready Meats--

(Concluded from preceding page)
lowest possible light intensity commensurate with good merchandising practices. After one half day exposure at 60 foot-candles bacon begins to lose bloom but is still saleable in its appearance. The two-day exposure period is definitely too long a time for sliced packaged meat in transparent film.

We spoke of light intensity in terms of 60 foot-candles of light. The foot candle is a common unit of measure and can be determined through the use of a regular photographer's light meter."

Table 3—Light Intensity In Self-Serve Stores

	Aisle Lighting (3 Ft. from Floor), Foot Candles	Display Case Lighting Foot Candles
Store No. 1 ...	20-40	40-75
Store No. 2 ...	35-60	55-90
Store No. 3 ...	35-45	10-200
Store No. 4 ...	40-60	50-200
Avg. 12 Stores	36-50	43-111

Table 3 shows data covering the light intensity in the display cases of four self-serve stores. You will note the last line covers the averages made in 12 stores. It is interesting to note that the average light intensity in the store itself was sufficient for most display purposes and that lights located in the display case might prove unnecessary.

"It is also interesting to note that light dispersal was not uniform in any single store. For example, in the case of store No. 3 it will be noted that the light intensity ranged from a low of 10 foot-candles in the corner of the showcase to a high of 200 foot-candles in the same display case. The 200 foot-candle light intensity created an insurmountable problem. Bacon, table-ready meats, ham, etc., would discolor under light of this intensity within a matter of 30 minutes.

"It is suggested that your display case be studied carefully for light intensity and means be taken to secure a uniform lighting effect over the entire case. Under no circumstances should the light intensity be higher than 60 foot-candles. It would be ideal if one could work at lower light intensities, e.g., 25 to 40 foot-candles. Check displays with a light meter to be sure.

"Some dealers have asked us whether the problem with display case lighting is greater when fluorescent lights are used than it is when using the incandescent bulb.

Table 4—Fluorescent vs. Incandescent Lighting

	4 Hours Exposure At 60 Foot- Candle Intensity	Fluo- Start	Incan- descent
Sliced Bacon ...	9.2	7.5	7.5
Sliced Ham ...	8.5	6.5	6.0
Sliced Bologna ...	8.5	6.7	7.0

Color-rating system: Exc.: 10, good: 8, poor: 5, unsalable: below 5.

JUST ASK US!

Turn to "What's New" page for useful information.

"As long as the light intensity is the same, the meat discoloration problem will be just as severe with the incandescent light as it is with fluorescent light (see Table 4). It is the amount of light available which counts—not the kind. Incandescent light brings out a truer color rendition, and for this reason has an advantage over ordinary fluorescent light.

"Recent developments of special fluorescent lamps, however, known as the soft white lamp and the deluxe cool white lamp produce good color rendition and both these lamps compare favorably with incandescent lighting.

"What is the answer to the light problem?" "There are a series of things one might do in the store," Carlin suggested.

"First, is quick turnover. There is no substitute for quick turnover either when controlling shrinkage or spoilage, or discoloration. Second, it is suggested that opaque labels be used on the exposed side of the package.

"These opaque labels or pieces of board or picture side in the case of bacon are valuable especially during times of slow movement.

"Third, it is suggested that the products be stacked on edge to reduce light exposure. Next, it is recommended that the practice of wide shingling be discouraged. It is also suggested that low wattage case lamps be used—better still use no lamps at all for the display case. Last, oxygen-free or vacuum packages might be the solution to the color problem.

"Yes, vacuum packaging or packaging under nitrogen gas might eventually prove the answer to the color problem. . . . There are several films or film laminates of low gas permeability. They are expensive—all have had limited application in various parts of the United States during the past year. This commercial application has not yielded particularly startling or encouraging results for the following reasons:

"High frequency of leakers due to (a) brittle films, (b) poor sealing, and (c) inability to withstand rough handling.

"High cost due to high material cost, high labor requirement, non-uniformity of films, limited gas-proofness of certain films, and poor appearing packages.

"If problems of film durability and gas permeability can be solved the vacuum package will likely revolutionize the marketing of cured, smoked, and table-ready meats," Carlin predicted.

"As the process now stands, its merits seem highly debatable when checked against its increased costs. Undoubtedly there will be appreciable progress in this field during the next few years. Such packages will enable pre-packaging at the point of production and may possibly permit lowering of costs through increased efficiency.

"This development, if and when it comes, holds much promise for self-serve stores.

"Until improvements are made, it would seem unwise to promote at the retail level prematurely an expensive package which fails to solve either the problem of deterioration or the problem of discoloration."

Just the Right Case Doubles Ice Cream, Specialties Sales

Fixture Couples High Degree Of Visibility with Ample Protection from Children

LINCOLN, Neb.—A self-service refrigerated vending case more than doubled the sales of packaged ice cream and frozen specialties for the Fenton Drug Store here, but it required just the right fixture to handle the job correctly, reports Manager Joe Schuchman.

The fixture that was found to do the job was a Jordan merchandising case with a high degree of visibility even for small children but high enough to keep the youngsters from toying with or making off with frozen suckers, etc.

The pharmacy is located in a section of the city where many low-income families reside and recreation facilities for children are limited. The drugstore is a time-honored "hang-out" for the small fry, and frozen confections hold a very strong attraction for them, especially in hot weather. A self-service vending case with a low top proved to be a big temptation for some youngsters, but a higher case with a glass front extending half-way down proved to be ideal for the situation.

The visual case is a bigger lure than ever for the neighborhood kids, with the various frozen specialties displayed in full view but behind glass. The little tots usually are accompanied by adults or older children who can utilize the self-serve feature



DOUBLED SALES of ice cream and frozen specialties resulted when a Lincoln, Neb. druggist installed this self-serve case with lots of visibility and tempting colored pictures to lure customers.

of the display fixture, but it doesn't require much time for a clerk to fish out the wanted item when a small tot unattended comes in with a dime.

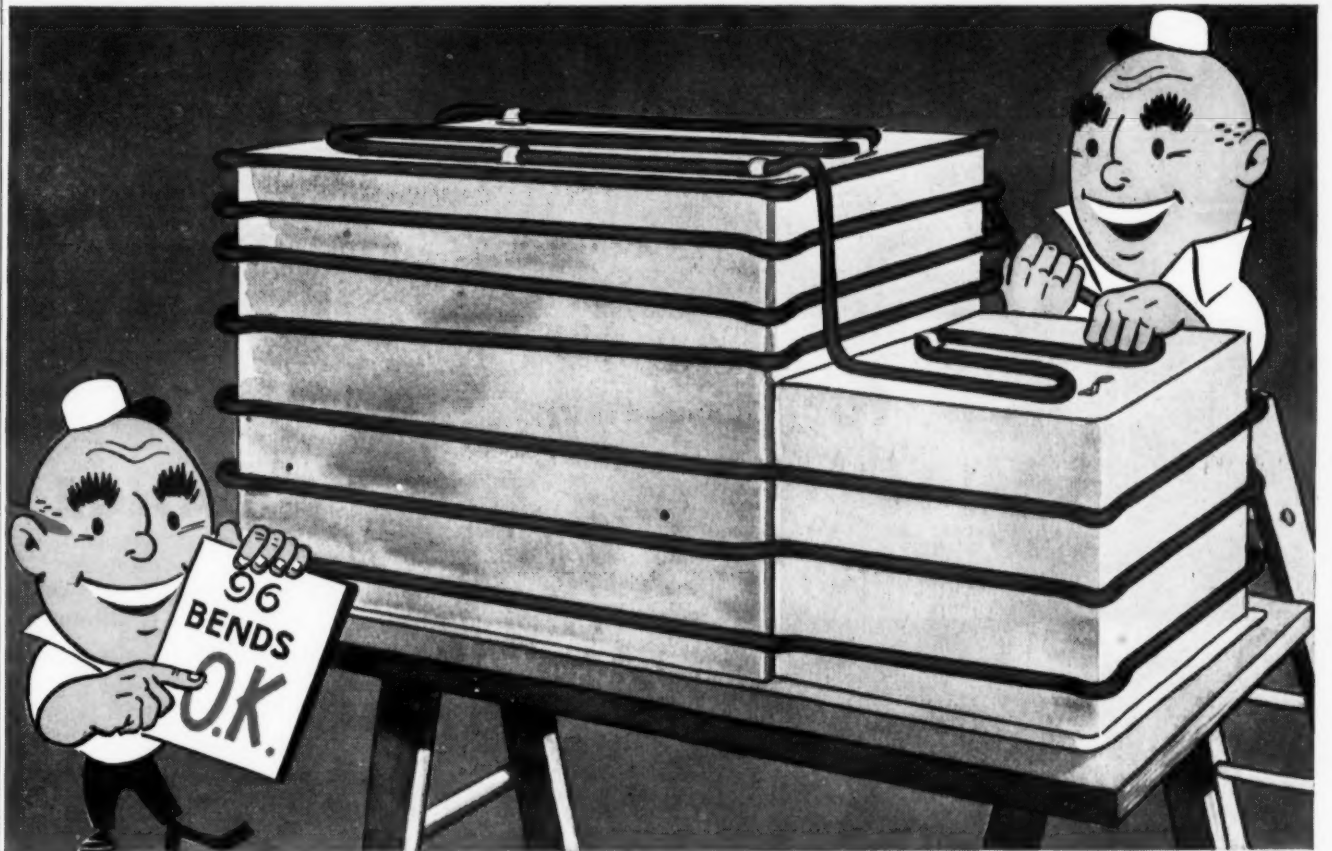
Powdered mixes for cold drinks, cut-out books for children, etc., also have shown an increase in sales volume as a result of being displayed close to the refrigerated "Mecca" of the small fry.

Schuchman also pointed out that one of his best traffic-pullers is a large self-service refrigerated bottle-cooler near the front of the store for cold soft drinks and mixers.

Patrons of the pharmacy's liquor department are reminded that cold mixers are available at no extra charge from the big soft drink cooler.

Moore of Cordley & Hayes Dies

NEW YORK CITY—Webster C. Moore, vice president of Cordley & Hayes here, died recently. Moore had been associated with the manufacturer of drinking water equipment since 1931.



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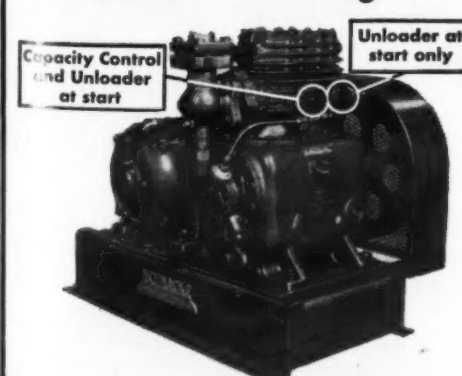
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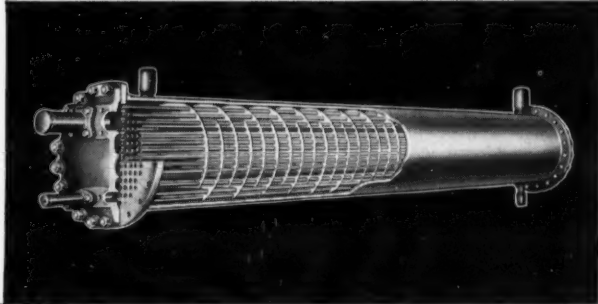
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More than 700 combinations of heads, baffle spacings and tube lengths, capacities from 1 to 200 tons. High rate of heat transfer; replaceable tubes; optional choice of single or dual circuits on 12" or larger; positive oil return without the need for oil separator; improved head design, tube hole grooving, tube rolling and baffle construction, make ACME DRY-EX* Water Chillers truly outstanding.

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for Freon or Ammonia in more than 30 models with capacities from 120,000 to 1,250,000 BTU/Hr. Separable fan sections. Provision for internally mounted receivers. Top vertical or front or rear discharge is optional and the air inlet can be located either front or rear. Vented, ball bearings fan shaft bearings can be mounted in any position.

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Two separate series, Ten Models for Freon and six for Ammonia. ACME Oil Separators provide positive oil separation, are easily accessible, require practically no maintenance and help to muffle compressor discharge noise.

ACME CONDENSERS

Are noise-free, easy to clean and have leak proof joints. A complete line of Freon, Ammonia, Shell and Tube and Shell and Coil is offered. You can choose from more than 120 standard sizes to get the right model to meet every requirement.

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Self-contained, compact and efficient Units completely wired and with refrigerant piping completed and tested at the factory. Can be used for heat-pump application where suitable heat source is available.

ACME LIQUID RECEIVERS

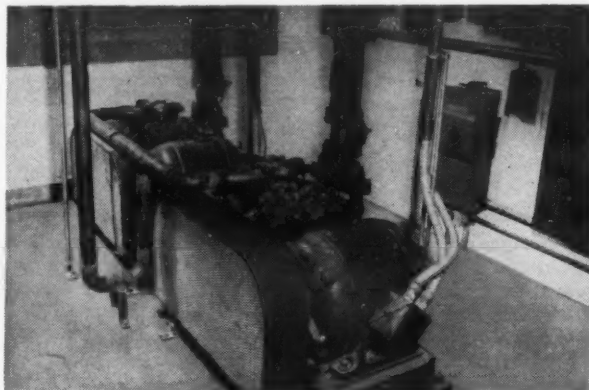
Offered in more than 70 standard sizes, from 6 7/8" x 18" to 30" x 240", for Freon, Ammonia or other refrigerants — are easy to install and maintain.

HI-PEAK* WATER COOLERS

have large storage capacity and are galvanized after fabrication. Offered in seven standard sizes. For intermittent or continuous operation. EVERDUR Tank and factory insulation are optional.

BLO-COLD* INDUSTRIAL UNIT COOLERS

Five distinct series in more than 260 combinations with dry coil operation or continuous brine spray defrosting or for flooded Ammonia operation. Coils are easily accessible, fan sections are separable and large doors facilitate inspection. Hot Dip galvanized after fabrication.



TWO SCHNACKE COMPRESSORS installed in the Miracle building which contains 165 tons of air conditioning. The building was designed for air conditioning, a fact which allowed for many economies.

Centrally Located Air Conditioning System Facilitates Zoning In New Miracle Building

CORAL GABLES, Fla.—The Miracle Bldg., claimed to be the newest and most modern commercial building in Coral Gables, is completely air conditioned. It is also claimed to house the greatest amount of air conditioning (more than 165 tons) under one roof in the city.

Upper floor of the two-story building is divided into offices cooled by an 80-ton central system powered by two 40-ton Schnacke compressors.

The lower floor houses 13 shops using up to 4,800 sq. ft. of area. The entire building is 200 by 120 ft. These shops include a large Three Sisters women's apparel store using a 25-ton Schnacke powered central system. The other stores use small self contained units.

Both of the central systems and eight 5 and 10-ton self-contained Baker or Carrier units were installed

by the Stuart Cooling Corp. of Florida, located in nearby Miami.

Explaining the installation, Arm and Cowan, president of Stuart Cooling, pointed out that the building was designed with air conditioning as an integral part of the structure.

Igor B. Polevitzky, the architect, had the large roof area insulated. Great expanses of glass, subject to sun load, were equipped with Thermoshades, adjustable outside louvers similar in appearance and function to venetian blinds. These have 6-in. blades that greatly reduce the sun load before it enters the building.

The structure itself, light in color, reflects rather than absorbs heat.

Ceiling elevations were designed of sufficient height to comfortably conceal ductwork above furred ceilings.

Machinery space was allotted at the

center of the building, facilitating zoning. With ducts radiating from this central area, duct sizes were considerably smaller, minimizing the problem of concealing them and lowering initial costs.

This also reduced static pressure losses enabling selection of smaller blower motors with consequent savings in operating expense, Cowan declared.

Direct expansion was used throughout, Cowan asserted. Two Schnacke AE 40 compressors equipped with Thermatrols were selected and cross connected for cooling the upstairs offices.

They use one common shell and tube condenser, part winding motors, and increment starters with time delay between starting of compressor no. 1 and compressor no. 2.

A sequence reversing arrangement was designed by Stuart and installed so that by setting a single switch in either of two positions sequence may be selected as compressor no. 1—time delay—compressor no. 2, or compressor no. 2—time delay—compressor no. 1.

Normally the lead compressor operates almost continually (due to constant introduction of large amounts of outside air) while the following compressor cycles due to internal sensible load fluctuations, Cowan explained.

With this sequence reversing arrangement, every 30 days the lead compressor is alternated so that any possible machine wear is equalized.

The offices are divided into four zones: east, north, south, and west and interior combined in one zone. The building is exposed on all sides except the west.

A separate aid unit is used for the east offices because of the great difference between morning and afternoon load due to sun load alone.

Three coils operating on a central blower serve the other three zones, one coil for each zone. Each coil is equipped with face and by-pass dampers. The dampers are controlled by averaging potentiometer thermostats.

This arrangement is ideal for Thermatrol operation, Cowan commented, for the action of the face and by-pass dampers parallels the action of the Thermatrol.

As less cooling is required, the potentiometer thermostats reduce the amount of air going through the coil and increase the amount being bypassed.

The tendency is to reduce the suction pressure whereupon the Ther-

matrol comes into action reducing the brake horsepower requirement of the compressor, and helps maintain the balanced condition between coil and compressor, at peak or partial load, that affords maximum efficiency and minimum operating expense, he said.

The large corner store occupied by Three Sisters, is conditioned by a Schnacke AF 25 compressor with Thermatrol.

There are two air units, one for the retail space and one for the stock area. These allow separate control, as the stock area load is constant whereas the retail space load fluctuates due to orientation and busy and slow sales periods. These requirement peaks and valleys are leveled off by Thermatrol.

For the self-contained units used by the other stores, supply and return wells furnish the condensing medium. These wells, installed by Stuart, circulate almost 500 g.p.m. (3 g.p.m. per ton) of 80° F. water.

Viking Appoints Gang As Asst. Sales Manager

CLEVELAND — Frank Gibbons, sales manager of Viking Air Conditioning Corp., has announced the promotion of Richard F. Gang to the newly-created post of assistant sales manager.

Gang steps up to the new position from his former post as sales promotion manager of the Heating department, which he has held since he joined the company in 1949.

In addition to his work with the Viking sales force Gang will be in charge of the promotion of Viking heating and air conditioning.

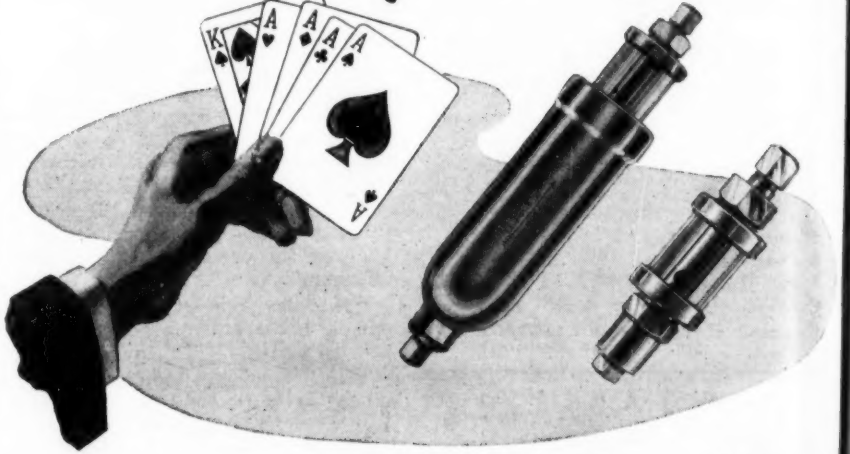
Perfex Appoints Engbring To Manage Advertising

MILWAUKEE—Appointment of Robert W. Engbring as advertising manager of Perfex Corp. here has been announced by V. P. Black, vice president.

Black also announced that plans are under way for an expanded program of sales promotional literature, dealer helps, and regular mailings to the trade.

Engbring was most recently advertising and sales promotion manager of K. O. Lee Co., a South Dakota machine tool and automotive equipment manufacturer.

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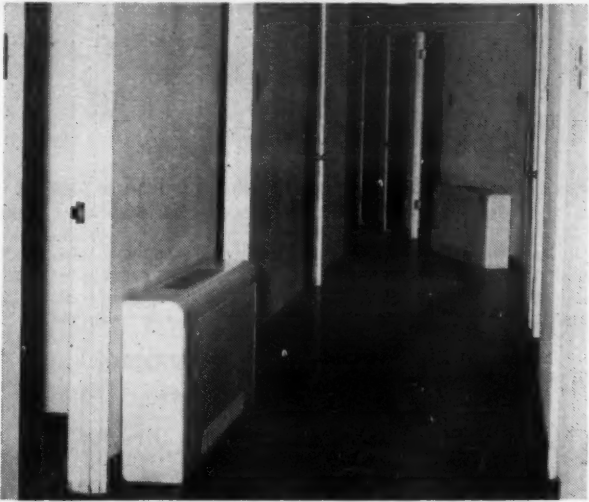
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EVEN THE HALLWAYS in the Elfen building, Alton, Ill., have been provided for in the newly-completed all-year air conditioning installation. Peculiar construction characteristics of the building made it necessary to introduce pre-heated or pre-cooled fresh air through stacks under pressure into the hallways where it is picked up by the units.

100-Year-Old Building Is Air Conditioned

Entire Business Block Uses Room Unit System, Central Water Source

ALTON, Ill.—An entire business block here containing the 100-year-old Elfen Bldg., with its recent addition, the 50-year-old Alton Banking & Trust Co. Bldg., is now heated and cooled by UsAirco Modu-aire room unit systems, operating from central cold and hot water sources.

The equipment was installed by Accurate Refrigeration Co., of East Alton. S. E. Sanner, of Alton, is the building's architect and engineer.

Eugene Elfen, the owner, has found that his fuel consumption has been reduced by one third since the new system went into operation.

The first in the series of installations was made in the original Elfen Bldg., which was erected in 1850 at the right angle corner of the wedge-shaped block.

The building had previously been heated by hot water radiation from an oil-fired boiler, sized to provide for both the existing building and a contemplated addition.

Thirty-two UsAirco Modu-aire units were installed operating from a Bell & Gossett chiller and a Schnacke 25-hp. compressor unit with a Thermostat capacity control, in the basement, for summer cooling and connected to the hot water supply for winter heating. A UsAirco 25-ton evaporative condenser was installed on the roof.

Shortly thereafter the building addition went ahead and another 45 Modu-aire units were installed, a 40-hp. compressor, a second chiller, and a 40-ton evaporative condenser were added.

The two systems have been interconnected so that in mild weather the 40-hp. unit carries the entire building load, and, when load conditions require it, the second compressor automatically cuts in.

On the cooling cycle, 45° F. water is supplied to the Modu-aire units and returned to the chiller at 52° F.

Compressor operation is controlled by the water temperature leaving the chiller, with a safety suction temperature cutoff.

On the heating cycle, hot water is circulated through the units and the water temperature is governed by a Minneapolis-Honeywell outside temperature controller.

To provide individual room control, unit blowers are thermostatically operated, while water flows through the coils continuously. M-H TA-42-B thermostats, mounted on Q-152A sub-bases, handle the summer-winter changeover on the same controller.

Peculiar construction characteristics of the Elfen Bldg., including the fact that the building occupies a sharply sloping plot, putting the first and second floors below ground level on one side, made it virtually impossible to introduce fresh air through the Modu-aire units directly.

This was overcome by the installation of stacks running from the roof, introducing pre-heated or pre-cooled fresh air under pressure into the hall corridors to be picked up by the individual units. A portion of the recirculated air is passed through a Dorex bank of activated carbon by a central fan unit.

A major alteration and remodeling program, including complete all-year air conditioning, has just been completed in the adjacent wedge-shaped Alton Banking & Trust Co. Bldg., which was built in 1901 and contains basement and first floor banking quarters and second and third floor rental office area.

Original plans for air conditioning of the entire structure called for a system with several package units using extensive ductwork.

However, an alternative preliminary layout was submitted for heating and air conditioning, using a central system for the banking area, and utilizing Modu-aire units for the

office area, thereby eliminating a large part of the ductwork.

It was pointed out that the room unit system provides more flexible control, eliminates unsightly ductwork, and isolates all compressor noise to one equipment room.

The Bank Building & Equipment Corp. of America, St. Louis, drew up the final mechanical plans incorporating the unit system, and the Accurate Refrigeration Co. was awarded the installation contract.

The banking area is conditioned from a central fan unit, using a UsAirco special C-215 unit air conditioner, reversing the normal position of the blowers and coils to give a blow-through instead of the conventional pull-through. This enabled the system to operate in four zones, with by face and by-pass dampers.

Cooling is by direct expansion, using a 20-hp. compressor unit. Summer humidity controls regulate the face and by-pass dampers.

Hot water is the heating medium, passing through a coil in the unit's air handling section. Water temperature from the gas-fired boiler is regulated by an outside weather controller and a spray type humidifier controls winter humidity conditions.

The office area on the second and third floors is conditioned by 43 Modu-aire units of various sizes. A 40-hp. compressor and chiller provide cold water for summer cooling. A 60-ton evaporative condenser, with separate 20 and 40-ton circuits, was installed in the room to handle the two compressors.

The same Modu-aire control system utilized in the Elfen Bldg. is employed in the bank, with continuous water circulation through the coils and blowers.

Calculating the Calculators

Portable Business Machines Change Heat Load In Air Cooled Offices

MANCHESTER, N. H.—An unpredictable cooling problem posed by heavy heat-producing calculating machines, which may be moved from one part of a new insurance building to another, has been solved by an unusual mating of two different types of air conditioning apparatus according to Carrier Corp.

The recently completed, air conditioned New Hampshire Fire Insurance Co. building in Manchester, said to be the finest office building in the state, has installed its I.B.M. calculating equipment in one of the rooms on the first floor.

But since the calculating machines are completely self-contained, they can be moved to other locations in the building, which would radically change the air conditioning load both in the space they were moved to and the room that was vacated.

To handle any possible future changes without alterations in the built-in central system air conditioning, two Carrier packaged Weathermakers sized to take care of the heat from the calculating machines alone were prescribed. The Weathermaker units, which are also completely self-contained, will be moved wherever the I.B.M. equipment goes.

All other air conditioning loads in the three story and basement building will be carried by a Carrier Conduit Weathermaster System, and in-

ternal zone systems, similar to the system installed in the United Nations building, and the first of its kind in the state of New Hampshire.

In contrast to the United Nations building's approximately 4,000 Weathermaster room units, this building will employ 199 units—one under each window.

The building is constructed of reinforced steel, with brick and granite exterior, and totals some 85,000 sq. ft. of office space, including the air conditioned basement. A Carrier centrifugal refrigeration machine of 315 tons capacity has been installed in an apparatus room in the basement to supply chilled water for the air conditioning systems. Air handling equipment is located in two penthouses on the third floor roof.

Welch Has New Fan Display Material

CINCINNATI—Three new window and floor displays for its line of hassock, window, and general utility "Air Flight" circulators are now available from W. W. Welch Co. here or its distributors.

Each display is lithographed in four colors, mounted on heavy cardboard and varnished. They have been designed so that a circulator is part of each display.

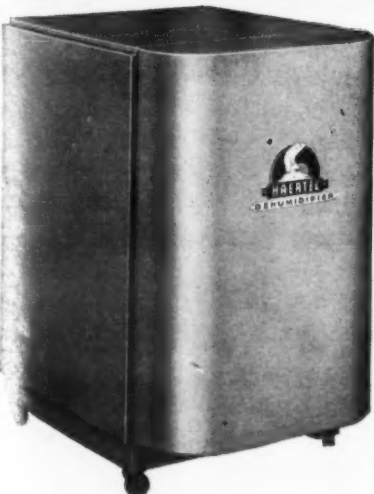
DETROIT'S PLAN—NOW MORE POWERFUL THAN EVER!

With the Addition of CHAIN STORE AGE
DETROIT Sells Both Your Independent and Chain-Store Customers the Vital Need for PERIODIC SERVICE CHECK-UPS!

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GROCERY STORES
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To a successful, power-packed, business building plan, **DETROIT** now adds the terrific impact of chain store coverage! Month after month **DETROIT** advertising will now be working for you stressing the vital need for periodic service check-ups to chain drug, grocery and variety stores the country over—a huge market with a huge investment in refrigeration! In addition, **DETROIT** will continue to sell your customers in the independent grocery, butcher, restaurant, dairy and ice cream fields with full page attention-compelling advertising. Never before has a program designed to promote proper refrigeration maintenance had such backing—and never before has a program had such results! Be sure your supply of **DETROIT** Expansion Valves, Solenoid Valves and Controls is adequate to meet all service demands.

Another Haertel Air Master DEHUMIDIFIER



BY THE MAKERS OF THE FAMOUS "VAULTMASTER" DEHUMIDIFIERS, STANDARD IN MANY INDUSTRIES SINCE 1938.

AIR-MASTER model 50-B is a new advance in the art of drying air mechanically. Its "Ratio Damper" gives peak performance at any space temperature from 65° to 95° F. A third heat exchange element permits a part of the work done in cooling the entering air down to dew point, to be recovered. This cuts down refrigeration load. The 50-B challenges all competition for efficiency and economy.

Protect critical equipment and materials from moisture, damage by RUST, MOLD, MILDEW, ROT, WARPING, TARNISH, CORROSION, CAKING.

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BUT THE ONE TIME IN MONTHS HE RECEIVED A PERSONAL CALL, WHERE WAS HE--AND WHO PICKED UP THE PHONE?



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"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Do You Have 'Both Feet On The Ground'?

TWO OUTSTANDING NAMES

Now combined to offer the refrigeration industry the most complete line of compressors and condensing units available.

(Full range of sizes 1/9—15 h.p.)

★ TECUMSEH PRODUCTS COMPANY

Plant at Tecumseh, Michigan manufacturing hermetic units from 1/9 H.P. to 3/4 H.P., conventional units from 1/6 H.P. to 1/2 H.P. and conventional compressors from 1/6 H.P. to 1 H.P.



The Tecumseh line of hermetics has long been known in the refrigeration industry for dependable, trouble-free performance. Over 8 million Tecumseh compressors are now in use in the field in freezers, household refrigerators, beverage coolers, water coolers, etc. Three out of four compressors, condensing units and systems purchased by manufacturers in 1950 for incorporation in refrigerating equipment were built by Tecumseh.

This combination of two outstanding names in the refrigeration industry is able to offer manufacturers and jobbers the most complete line, with respect to sizes and models, of conventional compressors and condensing units of any line in the industry.

Complete data on these Tecumseh and Universal Cooler units is available on request. Write today for specifications on the type and size unit you require in your particular application.

Dept. A-1

TECUMSEH PRODUCTS

TECUMSEH, MICH.

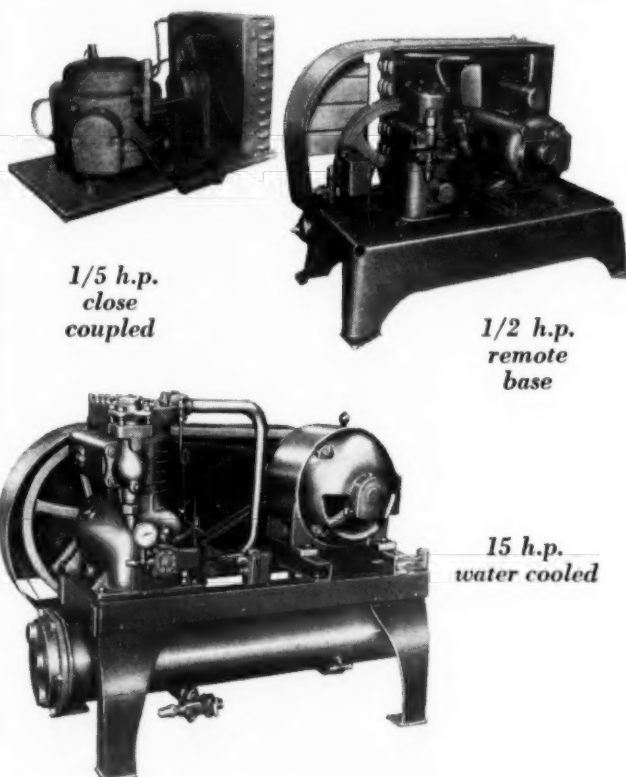
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★ UNIVERSAL COOLER DIVISION

Plant at Marion, Ohio manufacturing air cooled units in all sizes up to 3 H.P., remote units from 1/2 H.P. to 15 H.P., hermetics from 1/8 H.P. to 1-1/2 H.P.



The Universal Cooler line of compressors and condensing units has been serving the refrigeration industry for 29 years. With a full range of sizes up to 15 H.P., the Universal Cooler Division can supply a condensing unit for any application.

Dept. A-2

UNIVERSAL COOLER

MARION, OHIO

Division

Take It Or Leave It But Don't Ignore It

CONTEMPORARY authors contend that "life has no discernible direction or purpose, that ideals are illusions, that common values have disappeared, and that a sensitive person is bound to be destroyed or corrupted in a modern society in which common values have disappeared."

However, as Tennyson wrote, "we shouldn't let the hills of time shut out the mountains of eternity."

Those who view the present and future with such pessimism must strive to regain a proper perspective, according to Marriner Eccles (who recently resigned from a high policy-making position with the Federal Reserve Board in Washington).

While recognizing and paying tribute to the advantages of our type of society, Mr. Eccles observed that we must not lose sight of its shortcomings and failures, particularly in its relationship to other nations of the world.

"We have talked loudly in foreign capitals about the advantages of democratic capitalism," he noted, "but we have failed to convince our foreign listeners by our action."

"Democratic capitalism, if it is to survive, must hold its own against communism by works rather than by words, in the undeveloped backward areas of the world. Only by bringing them the tangible benefits of increased agricultural and industrial production, more efficient methods of distribution, and greater equality of income can we expect the underprivileged masses of the world to forsake the glittering but never fulfilled promises of communism."

The two basic causes of world conflict—rapidly growing population and consequent inadequacy of food and shelter—must be dealt with realistically in many areas of the earth if peace is to be established and maintained, Mr. Eccles themes. We can defeat ourselves by cynicism, by faintheartedness, and by failure to think clearly and boldly. We can succeed if we will have the courage, the character, the spirit, and the vision which inspired the forefathers of our nation.

"In the founding of their nation and the extension of its frontiers, our people overcame obstacles which loomed quite as large then as those with which we are confronted now," Mr. Eccles maintains.

We would do well to remember what St. Paul said to the Romans:

"We glory in tribulations knowing that tribulation worketh patience; and patience, experience; and experience, hope." (Romans 5:3-4).

Woodrow Wilson posed the Prime Problem in these words:

"How many of you will volunteer to carry the spiritual messages of liberty to the world? How many of you will forego anything except your allegiance to that which is just and that which is right? We die but once, and we die without distinction if we are not willing to die the death of sacrifices."

"Do you covet honor? You will never get it by serving yourself. Do you covet distinction? You will get it only as the servant of mankind. Do you not forget them, as you walk these classic places, why you are here. You are not here merely to prepare to make a living. You are here to enable the world to live more amply, with greater vision, with a finer spirit of hope and achievement. You are here to enrich the world and you impoverish yourself if you forget the errand."

The Trade-In Problem

General Suggestions for Determining The Value of Used Refrigerators

With the relaxed Regulation W regulations on instalment credit permitting trade-ins to be accepted as part of or all of the down payment on refrigerators, proper evaluation of used refrigerators will be more important than ever in determining the difference between profit and loss on any sales in which a trade-in is involved.

To assist dealers in arriving at a proper evaluation of used refrigerators, AIR CONDITIONING & REFRIGERATION NEWS is repeating a discussion of used refrigerator values that was prepared for the NEWS by a proprietor of an establishment that specialized in the wholesale and retail buying and selling of used refrigerators.

These articles are an attempt to provide a guide to the "actual" values of various makes and models of used refrigerators, and to explain how these values fluctuate with market conditions. These articles are not designed to be a substitute for a good handbook, or trade-in guide of used refrigerators values—the author recommends strongly that all dealers have such a book—but rather they are a supplementary service designed to help make each sale a profitable one.

Part 2

Following is a listing of prices which we have paid for hermetics in this area. These prices are NOT A TRADE-IN ALLOWANCE but rather what our company will offer to a dealer for these machines. These prices are thus roughly what any dealer may expect to realize from them if he attempts to sell them to a rebuilder or a used refrigeration dealer.

It will be seen easily that, if these machines are reconditioned by the dealer, more money will be realized.

In the following discussion I will explain our reasons for these prices and try to point out some of the problems which the late model hermetic trade-ins bring up.

	Operating	Non-Operating
Coldspot, 1930-1935	\$10.00-\$15.00	\$5.00
Coldspot, 1936-1941	about \$35.00	\$15.00
Crosley, 1936, GAT & GKT models	\$15.00	\$5.00
Crosley, 1947, HB1 models	\$15.00	\$5.00
Crosley, all others	\$25.00-\$50.00	\$20.00
Frigidaire, 1933-1934	\$10.00	No Value
Frigidaire, Standard, 1935	\$10.00	No Value
Frigidaire, 1936-1939	\$25.00-\$50.00	\$20.00
Frigidaire, 1940-1941	\$40.00-\$65.00	\$20.00
General Electric, Monitor, 1928-1934	\$10.00	No Value
General Electric, 1936-1941	\$15.00-\$65.00	\$10.00-\$20.00
Gibson, 1931-1935	No Value	No Value
Gibson, 1936-1941	\$10.00-\$25.00	No Value
Kelvinator, 1938-1941	\$25.00-\$65.00	\$20.00
Norge, 1939-1941	\$25.00-\$50.00	\$20.00
Stewart-Warner	\$25.00	No Value
Westinghouse, 1930-1935	\$10.00	No Value
Westinghouse, 1936-1938	\$25.00-\$50.00	\$20.00
Westinghouse, 1939-1941	\$40.00-\$65.00	\$20.00

It is common practice for the dealer to allow the customer anything that he can afford to give to conclude a deal, and it is for this reason that the dealer needs more knowledge than a simple set of established trade-in values. The important thing is for the dealer to know what he can realize from this trade-in after the deal and whether he is going overboard in his appraisals. Furthermore, any prices which are given at this moment can be changed immediately by a national price change from a manufacturer, or by a promotion put on by any large merchandiser.

The biggest headache in the trade-in business is the late model hermetic machine. The customer invariably confuses the value based on the cabinet style with the lower cost of repair which he was accustomed to pay with the older belt-driven models. It is very true that a late model machine in operating condition is worth a good allowance, but the same machine with an inoperative unit may be valueless.

We think that it is important to know what trouble to look for in these machines; what the replacement situation is regarding units, and what the probable cost of repair will be.

We consider a hermetic inoperative for any of the following reasons:

Noise while running; unless the noise is caused by any easily seen detail, the noise must be internal. In any hermetic, A NOISY UNIT IS A DEFECTIVE UNIT.

Evaporator not freezing throughout; it is possible that some minor trouble can be causing this condition, but the average dealer is not a qualified refrigeration serviceman and for his purpose he can figure an inefficient unit or a restriction and be 90% correct.

Short cycling; a machine that goes on and off in rapid sequence.

(To Be Continued)

Chicago Electric Assn. To Head Electrical Living Section of 'Modern Living' Show

CHICAGO—The Electric Association has completed arrangements with the Chicago Metropolitan Home Builders Association for cooperation in the "Modern Living Exposition," formerly called the Home Show, at Navy Pier, Sept. 22 to Sept. 30.

The Electric Association will serve as coordinator and manager of the Electrical Living section of the exposition which will occupy 100,000 sq. ft. of exhibition booths and additional space for educational displays in the one mile show.

Local industry participation will comprise individual firms, engaged in the distribution and manufacturing of major appliances, housewares, TV and radio, and will replace the Association's National TV and Electrical Living Show, which was cancelled for the year 1951. Representation will depict electrical living as it affects the home, its occupants, and its environments.

Among the educational displays which will be featured are animated attractions such as the electronic robot, the talking range, and the talking water heater. Plans for the Electric Cooking Institute call for an elaborate mass display of electric ranges on a 40-ft. front on one aisle and directly opposite, the Jane Foster Kitchen with adjacent recipe and kitchen planning centers. The range exhibit will dramatize "The Key to the Rainbow of Electric Cooking" with modern lighting effects and an arched entrance forming a rainbow, each color of which will introduce

a modern efficiency in the use of electric ranges throughout the country.

The Electric Association's Exposition Committee, headed by Merle J. Lucas of the Commonwealth Edison Co., has adopted as the Electric Association's Show theme and slogan, "Modern Living is Electric Living." Members of his committee are: Hilliard Graham, Hyland Electrical Supply Co.; Jack Ricard, The Sampson Co.; Rank Lashmet, RCA Victor Distributing Corp.; Max Geisler, The Harry Alter Co.; C. O. Nessler, Frigidaire Sales Corp.; Joe Novy, Westinghouse Electric Supply Co.; Walter O'Halloran, Triangle Industries Corp.; C. F. Woods, General Electric Supply Corp.; O. W. Vogel, Kelvinator Sales Corp.; and Ward M. Caldwell, Philco Corp.

An exposition preview meeting for electrical dealers in the Chicago area will be held during the early part of the show.

Dunagan-Langston Opens Store

DALLAS—The Dunagan-Langston Appliance Co. has announced the opening of a new electric appliance store at 111 W. Davis.

Ted O. Dunagan and Z. M. Langston are partners in the firm. They will handle the Admiral line.

The company maintains a service department for the complete servicing and installation of television and radio sets.

WALL WIRE PRODUCTS COMPANY

A FOREMOST NAME IN THE MANUFACTURE OF DIVERSIFIED WIRE PRODUCTS OF SUPERIOR QUALITY

STANDARD AND LIGHT WEIGHT SHELVES OF ELECTRO-POLISHED SOLID STAINLESS STEEL

REFRIGERATOR SHELVES WITH CHROME PLATE, ZINC PLATE, PRO SEAL, TIN, OR PORCELAIN FINISH

WIRE GRILLES • DISPLAY FIXTURES • GUARDS • BASKETS OF ALL TYPES FOR ALL PURPOSES STEEL STAMPINGS • MISCELLANEOUS FORMED AND WELDED WIRE ASSEMBLIES ARC WELDED ASSEMBLIES

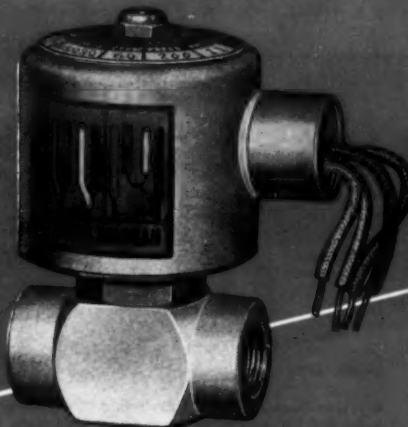
WALL WIRE PRODUCTS CO. PLYMOUTH, MICHIGAN

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

SPORLAN SOLENOID VALVE with Twice Dipped Layer Wound Coil

does it again!

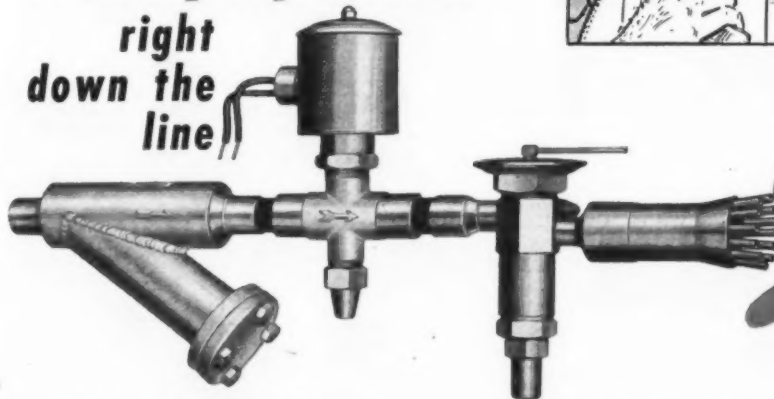


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STRAINERS • CATCH-ALLS
SELECT-A-LEVEL Electronic Liquid Level Controls
and the Only THERMOSTATIC EXPANSION VALVES
with FLOWMASTER ELEMENTS and SELECTIVE CHARGES

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NATIONAL REFRIGERATOR MARKET REPORT, INC. DEPT. AC-1, P.O. BOX 606 LOS ANGELES 25, CALIF.

McNairy To Manage G-E Appliance Park Project

BRIDGEPORT, Conn.—J. W. McNairy has been appointed manager of the General Electric Co.'s Appliance Park project at Louisville, Ky., Clarence H. Linder, general manager of the major appliance department, announced recently.

McNairy, who was formerly manager of engineering and manufacturing of the major appliance department, has been in charge of preliminary work on the multi-million-dollar park.

In his new capacity he will be responsible for the building planning and construction program, procurement of new manufacturing equipment, and the transfer of facilities,

"Be Wise Characterize"
**DIVERSIFY YOUR
SELLING HABITS**

**SELL A REFRIGERATOR
THAT DEFIES COMPETITION**

**SELL A REFRIGERATOR THAT
GIVES YOU THE MOST PROFITS**

**SELL A REFRIGERATOR
THAT THE FLORIST SHOP
OWNER IS LOOKING FOR**

THE "Character"
**FLORISTS' DISPLAY REFRIGERATOR
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Write for Literature, Discounts
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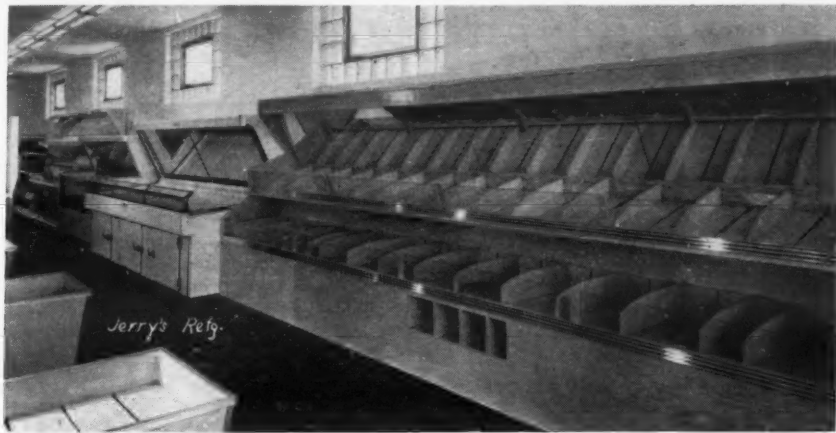
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Refrigeration and
Air Conditioning parts
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AIRO SUPPLY CO.

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FIXTURES which Jerry's Refrigeration Co. builds for customers are always photographed empty before the food goes in. This shows fine details impossible to see after shelving is filled.

Store Planning Service, Photographs Cinch Sales for Commercial Dealer

WAUSAU, Wis.—Provision of a store planning service and use of photographs to prove sales points are two of the reasons for the continued success of Jerry's Refrigeration Co. here in selling commercial refrigeration equipment to the food store market, according to Gerald Mertinke, president.

Other reasons, he will tell you, include such things as handling allied items, working with wholesale grocers and meat packers, a special method of mounting compressors, keeping records on the success of grocers for whom the company has installed equipment, and attending food shows and meetings.

Mertinke is a Hussmann dealer

who has specialized in grocery store, supermarket, and drugstore refrigeration for the past 14 years.

For years, the firm has initiated every sale with a "store engineering" service competent enough to plan every inch of a job.

Mertinke, himself, does much of this work, with help from interested engineering firms where particularly difficult problems are encountered. In many instances, he noted, this service has meant the difference between profit and loss.

He explained: "We have found that a blueprint and sketch of what the future installation will look like is like the old Chinese proverb: 'One picture is worth a thousand words.'



COMPLETE LINE of butcher supplies, saws, choppers, and grinders carried by Jerry's permits him to put the whole job on one ticket.

"Our selling job starts with making up a complete floor plan of the prospect's store, including the shelving, cases, new floor, and lighting. Sometimes it is necessary to incorporate a new front, if the doors are not properly arranged.

"After this planning has been done, we believe that we have 'pre-sold' the customer. It is never too difficult to complete a sale once the grocer has looked over his own store in blueprint form, backed up with pictures of other stores we have remodeled or designed.

"I might mention," he added, "that before we go into too much detailed work, we find out the customer's financial status—about what he can afford, the amount of added business he can secure by remodeling or building a new store. This, of course, is important to both customer and ourselves."

The matter of photography in clinching a sale is extremely important, Mertinke has found.

"After each installation, we have our photographer take pictures of the store before the groceries have been put on the shelves," Mertinke pointed out. "Then, after the groceries have been added, the photograph is made from the same position.

"These pictures give an effective 'before and after' story so that we can display all details of construction work, as well as the final effect, with the photographs placed in pairs in each salesman's briefcase.

"This is undoubtedly our most ef-

fective selling tool, and we have on hand photographs of every job we have installed since the end of the war."

Bills for commercial photography run high in the dealer's annual budget, but, inasmuch as job after job can be traced to the interest which such photographs arouse in a potential prospect, it is considered well worthwhile.

Mertinke carries a complete line of butcher supplies. Saws, choppers, price tags, shelving, hard-surfaced materials, etc., are all made available to customers.

"By selling these items, we can write an order and put it all under one contract," he said. "These small allied items provide a real convenience for customers, in that they do not have to go elsewhere to purchase additional equipment."

Another company practice is to work with the wholesale grocer and meat packer.

"Many valuable tips are passed along from this source," Mertinke said. "Many of the leads which developed into our most outstanding jobs were turned in by wholesalers' salesmen, anxious, of course, to increase sales of their own products in any store."

Mertinke puts a lot of stress on the manner in which he installs all compressors. As an important "selling hook," he points out to his prospects that no matter how small the unit may be, a cork and rubber flat mount eliminates vibration and protects the

(Concluded on next page)

He ought to know...

He Does Know:

**"You Cut Service Costs Way Down with
the Trouble-Free Performance of
KELVINATOR UNITS and PARTS!"**

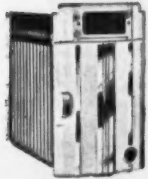
Here Is What Harry Bransky, Successful Chicago Refrigeration Contractor and Kelvinator Equipment Buyer For Many Years, Says About Kelvinator Dependability:



HARRY L. BRANSKY, President
Bransky Refrigeration Company, Chicago, Illinois

One of the many Contractors who agree that

**You Build Better Business
with Kelvinator Equipment!**



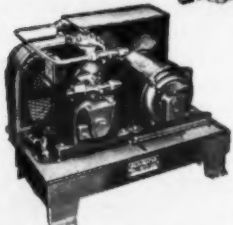
Kelvinator Stainless
Steel Evaporators



Kelvinator Silica
Gel Driers



Kelvinator Compressors
(1/4 H.P. to 5 H.P.)



Kelvinator Open Type
Condensing Units
(1/4 H.P. to 5 H.P.)



Kelvinator Sealed Type
Condensing Units
(1/4 to 1/2 H.P.)



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It is also more economical to use Kelvinator condensing units and parts in view of the trouble-free performance which cuts down considerable on our service cost.

We have every confidence in your equipment.

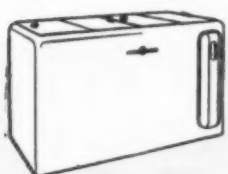
Very truly yours,
BRANSKY REFRIGERATION CO.

HLB:hmd By: *Harry L. Bransky*

PROFIT TODAY... BUILD FOR TOMORROW WITH

Kelvinator

THE NAME THAT SELLS... THE NAME THAT SATISFIES!



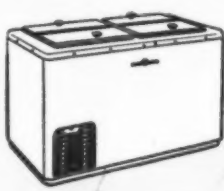
KELVINATOR
BEVERAGE COOLERS



KELVINATOR-FROZEN
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WATER COOLERS



KELVINATOR
ICE CREAM CABINETS



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AIR DRIERS

BETZ "COMPAC" PANEL UNIT

A LITTLE
GIANT
IN CAPACITY
ONLY 20"
HIGH



Ideal for use in back bars, small reach-ins, beverage boxes and miscellaneous applications where space is at a premium.

MODEL NO.	BTU AT 1° TD	CFM	SURFACE SQ. FT.	DIMENSIONS		
				H	W	D
100-BB	100	165	32.93	20"	15 3/8"	5"
130-BB	130	220	43.84	20"	15 3/8"	6 1/2"
160-BB	160	260	54.76	20"	15 3/8"	8"

See Them at Your Wholesalers

BETZ CORPORATION

HAMMOND • INDIANA



MERTINKE stands in front of one of his food show exhibits, prepared with the help of distributor who furnished the actual frozen foods.

Photographs Pre-Sell Customer

(Concluded from preceding page)
life of the entire supermarket installation.

Also impressive to prospects is the installation of a varnished veneer panel on the wall, near the compressor unit, for the mounting of controls.

All such installations are photographed, and the resultant pictures used in efforts to close other sales.

Along with the photographs, Mertinke keeps extremely complete details on the success of grocers for whom he has installed complete equipment.

Typical is the "29" Supermarket in Wausau, which opened a year ago. Mertinke designed the store,

built the equipment, and supplied all of the refrigeration.

This store, Mertinke's figures show, is averaging between \$21,000 and \$22,000 a week, which is far above ordinary, considering that the selling area covers only 36 ft. by 75 ft. As a result, the two young men who started up the store, with Mertinke's guidance, are among the firm's most enthusiastic boosters.

Many dividends are also received by attending the various food shows and banquets in the area, the dealer related.

At each, he exhibits a billboard of store layouts, which have been installed by his company, with some 24 photographs indicating various "engineering touches" which led to success.

"We usually try to display an actual case or two," Mertinke added. "If this is a dairy or frozen foods case, the distributor is always glad to load up the case and put up his advertising, with actual foods to lend additional interest. This gives color and life to the display."

"However, we are careful not to overload the case with food items. In no instance does it pay to detract interest from the display fixture itself."

The progressive company has been honored several times by Wausau business organizations as an example of a commercial "community service" organization.

Kotel Will Represent Reco In Midwest Area

PHILADELPHIA — Refrigeration Engineering Corp. announced the appointment of William V. Kotel as its representative in the Chicago, northern Illinois, southern Wisconsin, and Iowa areas.

Kotel was associated with the commercial refrigeration industry from 1935 to 1942 as a sales engineer. Subsequently, he served as a precision inspector with Minneapolis-Honeywell (Aircraft division) in Chicago.

Since 1946 he has been representing manufacturers specializing in commercial refrigeration for food stores and food serving fields.

Navy Jet Testing Lab Gets \$1,200,000 Worth of Refrigeration Equipment

TRENTON, N. J.—Approximately \$1,200,000 worth of refrigeration equipment and air testing rigs are being provided for the new aeronautical turbine laboratory being constructed here by the Navy's bureau of yards and docks.

Specifically designed to test Navy jet engines, the laboratory will consist primarily of five testing chambers composed of two altitude "strato-chambers," two test cells, and one turbo prop cell.

The refrigeration plant, designed and built by York Corp. for the air treating systems, will develop 7,200 hp. in producing the severe test conditions.

To give some indication of the tremendous size of the refrigeration system and the demands to be made upon it, Stewart E. Lauer, president of York Corp., made the following comparison:

"If expressed in terms of air conditioning, the refrigeration capacity for this project would be sufficient to provide air conditioning for nearly 3,000,000 sq. ft. of building space, an area approximately the size of two Empire State Buildings."

According to Lauer, the Turbo Compressor Refrigeration system will be used to cool air for the engines under test. The air will be cooled in three stages with final stage capable of either heating or cooling the air passed into the test chambers.

The first stage is known as the "A" rigs, and consists of three chambers, each with a bank of cool-

ing tower water coils and "Freon-12" recirculation coils.

This stage will cool the air to about 40° F. by the use of cooling tower water and three 1,600-hp. York Turbo Compressor Refrigeration systems. This air will then enter the second stage called the "B" rigs.

Each "B" rig will have a set of "Freon-12" recirculation coils which will cool the air to -23° F. The refrigeration for this stage consists of three 600-hp. York systems. From the "B" rigs, the -23° F. air will go to the third stage, consisting of three "C" rigs or two "D" rigs.

The "C" rigs will cool or heat air to any desired temperature between 190° F. and -67° F. Cooling or heating will be done by brine (Trichloroethylene) coils. The refrigeration for these is three 200-hp. York Turbo Compressor systems.

The "D" rigs will heat air to any desired temperature between -23° F. and 190° F. Heating will be done by brine (ethylene-glycol) coils.

The low stage evaporator, a shell and tube brine cooler, will furnish cold brine for the "C" rigs.

The intermediate stage evaporator will be a flash cooler for the "B" rigs operating at an intermediate load on the second stage compressor.

The high stage evaporator will be a flash cooler for the "A" rigs operating as an intermediate load on the high stage compressor.

Shell and tube condensers using cooling tower water will be used. Each parallel system will be capable

of independent operation, it was explained, while the "Freon-12" will be recirculated through the coils by means of a pump from the flash cooler located within the insulated housing containing its cooling rig.

The contract for the refrigeration and air testing rigs was awarded to Mehring and Hanson Co. of Arlington, Va., in December, 1949.

The Electronic and Calibration Section of the shop building and office space in this building will be air conditioned by other York systems.

These, it was pointed out, are in addition to the 7,200 hp. York Turbo Compressor systems, which will provide the refrigeration.

Self-Serve Low Temp. Case Yields \$30 Volume Per Day For Pharmacy In Denver

DENVER—How much added volume per day will a low temperature self-service refrigerated dispensing cabinet for ice cream and frozen confections bring a drugstore?

For the Dansberry Pharmacy at 14th and Champa streets in Denver the case is said to produce an average volume of close to \$30 per day.

The dispensing cabinet, a Weber Showcase & Fixture model, has two compartments. One compartment holds packaged ice cream; the other contains frozen candy bars, ice cream sticks, and sherbet sticks.

Proprietor James Dansberry installed the cabinet after making an analysis of sales of ice cream and frozen confections from his soda fountain, which indicated that too much employee time was being used.



"the destructive pair"
that cripple

PRESSURE-LUBRICATED COMPRESSORS

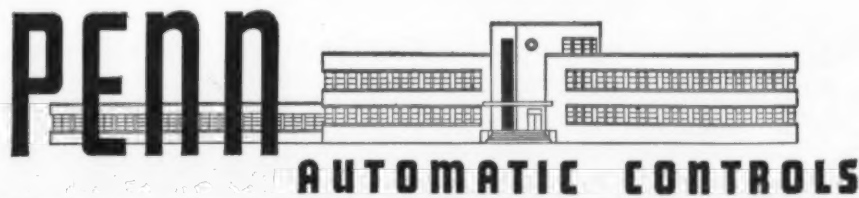
It's a sad story when either of "the destructive pair" ... low oil pressure or slow pickup of oil pressure ... go to work on a pressure-lubricated compressor. When that happens, damage to seals and bearings may result, even in the best of refrigeration compressors.

But, you can stop "the destructive pair" from their crippling work with the new PENN Series 275 Oil Protection Control with built-in Time Delay Switch.

Here's how it works. When compressor starts, if the oil pressure does not build up to the proper point within a safe time period, the PENN 275 stops the compressor automatically before damage can occur. If oil pressure drops below a safe minimum during

the running cycle ... and does not rise to normal within the time delay period ... the control stops compressor operation. Thus, the compressor never operates more than the predetermined safe time on subnormal oil pressure. Result? Positive, automatic protection at all times!

Investigate this new, low-cost protection for refrigeration compressors or for other pressure-lubricated equipment. For complete information ask your compressor manufacturer or wholesaler or write Penn Electric Switch Co., Goshen, Indiana. Export Division: 13 E. 40th Street, New York 16, N. Y., U. S. A. In Canada: Penn Controls Limited, Toronto, Ontario.



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BRAZING ALLOYS
AND BRAZING FLUXES

TO ALL SPECIFICATIONS
IN ALL FORMS & SIZES

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YOU CAN'T BEAT THE VICTOR DISPLAY CASE LINE

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- Variety of sizes and endless models for any store layout.
- Economical and Efficient.
- Displays that Sell.



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What's New

When requesting further information on new products, please use "Information Center" form.

Fire Protection System Detects Fire by 'Seeing' It

KEY NO. A-830

CAMBRIDGE, Mass.—A photoelectric fire protection system that instantaneously detects fire because it sees fire rather than depends on heat, smoke, or other indications resulting from the presence of fire has been introduced by the Fireye Corp. here.

Because of the photoelectric principle on which it is based, the manufacturer says, Fireye FD-10 is capable of detecting a very small fire, yet ignores extraneous light of any intensity.

The Fireye protection block consists of six detectors and one control panel. They provide coverage up to 120 by 80 ft. because each detector will monitor any area within a radius of 20 ft. For larger areas, combinations of blocks can be made.

An electrical pulse of sufficiently low intensity to prevent a fire alarm indication is continuously applied through all circuits, according to the manufacturer. The loss of this signal

from any wiring or component failure will actuate a relay to give a warning, thus acting as a self-monitor.

Connections can be made to a wide variety of existing alarm and automatic extinguishing systems.

Fireye detectors are arranged in a series circuit for wiring simplicity and mount directly on any standard 3-in. outlet box. The control panel is designed for wall mounting and has a quickly removable plug-in chassis.

The detector is a PbS Infrared Photocell. Supply voltage is 115-230 volts, 50-60 cycle and 6 volts, a.c.-d.c. 2 amp. External load is 6 volt d.c. at 2 amp. maximum for the trouble indicator lamp or bell and 6 volt a.c. at 2 amp. maximum for the fire indicator lamp or bell.

Prevore Introduces New Infrared Broiler Unit

KEY NO. A-831

BROOKLYN—The Prevore Electric Mfg. Corp. here is introducing a new infrared, open front, junior chrome broiler with two heats—one at 1,000 watts and the other at 300 watts.

Other features are two broiling positions, folding broiling rack, drip tray, and glazed ceramic brick heating unit. It is priced at \$10.95.



Ace Ice Cream Cabinet Provides 25% More Space

KEY NO. A-832

NEW YORK CITY—The Ace model OG11C low-temperature ice cream (frozen foods) cabinet is designed to provide 25% more space for packages without increasing the size of the cabinet, the Ace Corp. announced recently.

In addition, Ace engineers were able to drop the internal temperature 10% by improved insulation techniques, the company added.

The case is equipped with three full color, three-dimensional pictures, full mirror, fluorescent lights, and quadruple Thermopane front. A low wattage heating element installed around the front of the Thermopane glass retards condensation.

Uniform low temperature is obtained by additional high level refrigerated surface under the superstructure and above the front glass.

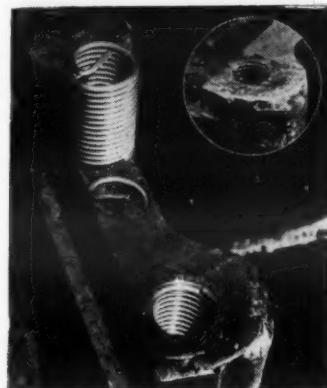
Winter Air Conditioner Designed for Crawl Space

KEY NO. A-833

YORK, Pa.—Introduction of a new small size suspended-type winter air conditioner for installation in crawl spaces, attics, or closets of small homes has been made by York-Shipley, Inc.

The new unit, which is completely packaged, has a capacity of 90,000 B.t.u. at the bonnet and is enclosed in a gleaming white casing like other models in York-Heat's "white" line of heating equipment.

York-Heat has added this unit to the line in answer to an increasing demand for an oil-fired heating unit that can be easily installed in homes where there is no available space for a normal-style furnace. The new unit is 23 in. square and 59 in. long.



Heli-Coil Wire Inserts Speed Thread Repairs

KEY NO. A-834

LONG ISLAND CITY, N. Y.—Stainless steel helical-wire thread inserts for speeding thread repair operations on heavy electric motor castings are being manufactured by the Heli-Coil Corp. here.

The company claims that by using this insert, new threads, stronger and more wear-resistant than original threads, are installed in 80% less time than conventional repair methods require. Savings are up to 60%.

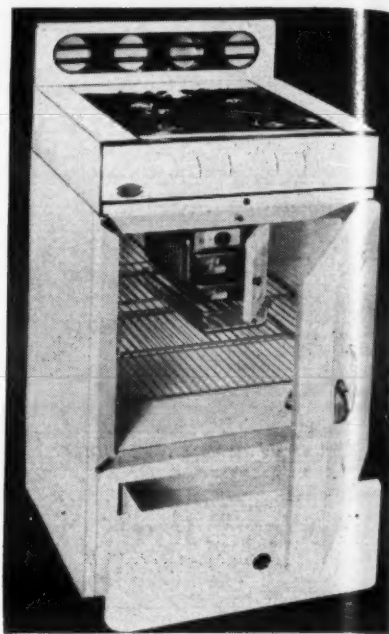
New threads are installed by drilling out the old 1½-6 threads, retapping with 1½-6 Heli-Coil taps, and installing a 1½-6 stainless steel Heli-Coil thread insert with an inserting tool to bring the hole back

to original thread size. These thread liners resist abrasion and eliminate seizing, galling, and corrosion.

The unmounted thread insert, with a free diameter slightly larger than the receiving hole, is self-locking when positioned in the hole, yet may be removed with another tool.

Because these precision-formed coils of diamond-shaped 18-8 steel wire provide higher thread-flank engagements, the threads in the repaired hole can safely withstand 20 to 30% higher loads than original threads, the manufacturer claims.

King Offers Combination Range-Refrigerator Unit



KEY NO. A-835

BROOKLYN—A combination 4-burner gas stove and 4-cu. ft. electric refrigerator is being offered by King Metal Products, Inc.

The gas burner section, with tray, is located on top of the refrigerator with controls on the front panel. The stove section is fully insulated from the refrigerator, and finished in porcelain.

Refrigeration for the 4-cu. ft. refrigerated storage section is furnished by a Tecumseh condensing unit carrying a 5-year warranty. A dry storage drawer with 1.2 cu. ft. of storage space is a feature. Refrigerator section is finished in baked enamel on heavy steel.

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

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Products Advertised (list name, page, and issue date)

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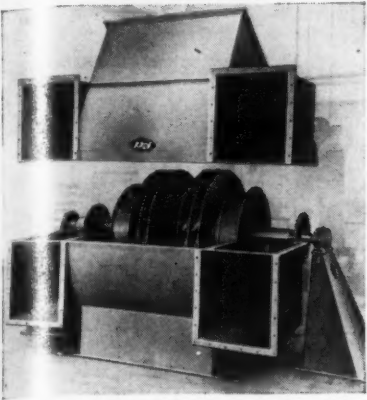
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What's New (Cont.)

Prat-Daniel Forced-Draft Fan Has 3 New Features



KEY NO. A-836

E. PORT CHESTER, Conn.—A forced draft fan embodying three new features that improve aerodynamic characteristics and allow more efficient conversion of velocity to static pressure has been introduced by the Prat-Daniel Corp. here.

These features are:

1. Large, deep inlet cones streamlined to reduce turbulence at the inlet.

2. Open space between the wheels of double wheel models rather than a common center disc, permitting complete four-way diffusion of the air leaving the wheels.

3. An oversize housing to assist diffusion.

Plotted performance shows peaks of efficiency and horsepower curves falling well within the proper fan selection range.

This feature makes possible selection for maximum efficiency without overloading, the company claims.

Precisely shaped backward curved blades are designed to offer a nearly perfect aerodynamic flow across the leading and trailing surfaces, further contributing to the smooth flow of air through the fan.

The Thermix Corp., project and sales engineers for Prat-Daniel, states that the development of this fan was a combination of the efforts of the research departments of Prat-Daniel and the company's associates in Sweden, Great Britain, and France.

Bulletin 300 on the fan is distributed by Thermix, which is located in Greenwich, Conn.



Majestic Incinerator

Connects to Furnace Flue

KEY NO. A-838

HUNTINGTON, Ind.—The Majestic Co. here is marketing an indoor incinerator which, according to the company, "connects easily to the furnace flue, yet does not impair efficiency of the heating plant."

The incinerator not only burns trash, wastepaper, and rubbish, but also gets rid of all wet and dry garbage, it is claimed.

The unit is constructed so a down-draft keeps air circulating through the refuse, the manufacturer said. This, it was pointed out, acts as a drying agent and hastens burning.

Contents need be burned only once or twice a week, or whenever the incinerator is full, the firm stated.

Municipal sanitation and health codes prohibiting the burning of rubbish and garbage in open outside burners make the Majestic incinerator "an item which is a natural tie-in with a furnace sale," it was further noted.



Skinner Solenoid Adapted To Domestic Oil Burner

KEY NO. A-839

NORWALK, Conn.—The standard Skinner V-5 stainless steel solenoid valve has been adapted for use with domestic oil burners, increasing their efficiency and eliminating soot-causing smoke, the Skinner Electric Valve division of the Skinner Chuck Co. here announced recently.

Socony-Vacuum's technical service department adapted the valve and combined it with a time delay device so that it will regulate fuel flow to synchronize with the moment when perfect combustion conditions are set, the company reported.

This prevents the flow of oil until the oil pressure and fan speed reach their peak efficiency. At this point the valve opens and oil is sprayed suddenly into the fire box already filled with swirling air which readily vaporizes the fuel.

The result is proper combustion from the very beginning with practically no soot producing smoke.

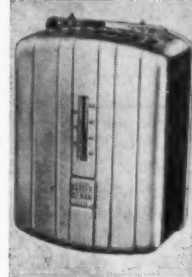
When the burner stops the valve operates in the reverse, instantly cutting off fuel flow while allowing the fan to operate for a few seconds to allow complete combustion of the oil present in the chamber. No residual oil is left to cause smoking and sooting when the burner starts the next time.

Not only does the Skinner solenoid valve and time delay device prevent soot accumulation, but it also lowers fuel bills by providing more efficient burning of the oil.

Barber-Colman Has Low Voltage Duplex Thermostat

KEY NO. A-8310

ROCKFORD, Ill.—For two-position control of motor-operated valves, pumps, relays, and other heating system components,



the Barber-Colman Co. here has introduced a low voltage duplex thermostat that controls at reduced temperatures for night or non-occupancy periods of system operation.

Control is changed from one thermostatic element to the other by an automatic time clock or manual switch. Settings are easily varied from 45° F. to 75° F. for night and from 55° F. to 85° F. for day operation.

Stops inside the case can be set to limit or lock the control settings.

for more

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Schaefer Display Case Offers Glass Front, Open Top

KEY NO. A-837

MINNEAPOLIS—A new glass front, open top ice cream cabinet has recently been announced by Schaefer, Inc., manufacturer of Schaefer ice cream cabinets and Pak-A-Way home freezers.

Designated as the model GF-16, this cabinet has a capacity of 15.92 cu. ft. It has a total capacity of 665 pint ice cream packages. Four narrow compartments each hold 140 pints, and one large compartment holds 105 pints, 26 rectangular half-gallons, or 22 round half-gallons.

The model GF-16 measures 62½ in. long, 30½ in. wide and 52 in. high at the top of the superstructure which has a flat top surface for displaying toppings and related items.

Four-thickness Thermopane in front provides mass display of ice cream



packages, flood-lighted by fluorescent light from the superstructure through the open top. Built-in, sliding, disappearing night cover is provided.

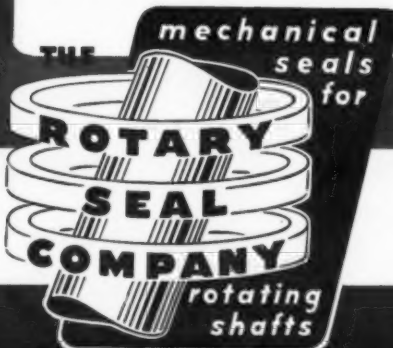
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Quiet-cooled! The exclusive Oasis Fanless Condenser elimi-

nates fan and fan-motor—no noise, hum, or vibration.

Oasis advertising pre-sells 2,400,000 people in these weekly news-magazines. Local promotions channel them to your store!

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OASIS



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Servicing Hermetics In the Field

Regular appearance of the weekly series of articles on field servicing of hermetics which has been published in the NEWS for the past several months is being temporarily interrupted.

Arne Perttola, the author of these excellent down-to-earth service articles, has been called upon to make a brief, flying trip to Israel as consultant to a hermetic rebuilding firm there. He will resume the series upon his return.

Johnson Service Holds Annual Training Session

MILWAUKEE—Engineering graduates from 20 colleges took part recently in the annual training program of Johnson Service Co. here, manufacturer, engineer, and contractor for automatic temperature and air conditioning control systems.

The intensive six-week course included classroom discussions and demonstrations, laboratory work, and field trips to current Johnson projects and installations already in operation.

The graduates have been assigned to branches throughout the country where they will assist Johnson's staff of field engineers who plan and supervise the installation of the automatic temperature and air conditioning control apparatus made by the company.

The Johnson training program is under the direction of J. R. Vernon, sales promotion manager, who also handles, with the assistance of the western district manager Paul Gay-

man, the instruction in business subjects.

The characteristics of apparatus and engineering applications are taught by H. W. Alyea, chief field engineer, M. M. Herrick, manager of publications and displays, and a number of assistants.

Super-Cold Corp. Opens New Plant in Los Angeles

LOS ANGELES — Super-Cold Corp.'s new plant No. 7 at 840 E. 111th Place here was scheduled to be completed Aug. 15.

About 200 persons will be employed at the plant, the company has reported.

The building features new tilt-up construction. It has 34 ft. of clear height from the floor. Doors 22 ft. high in the rear of the structure make it possible to move heavy equipment in and out.

In addition to refrigeration equipment, the company is manufacturing Navy rockets, airplane wings, and other types of mechanical equipment.

Nebraskans Tell Why They Bought Their Refrigerators, Freezers; What They Want When Buying New Equipment

LINCOLN, Neb.—"If you were buying a new refrigerator now, would you choose one with a freezer storage compartment?" In choosing a freezer "if both white and other colors were available, what color would you prefer?"

These and many other questions concerning refrigerators and home freezers were asked of rural residents of the state of Nebraska by the research department of the *Nebraska Farmer* in a recent survey of its subscribers. It is thought that the replies to these questions will be of particular interest to refrigerator and freezer manufacturers.

The survey was divided into two principal parts (1) refrigerators and (2) home food freezers. Replies were received from 304 persons from all parts of the state. Following are tabulated answers to some of the pertinent questions in the survey.

On the subject of refrigerators:

Which of these types is it?

Type	Number	Per Cent
Electric	88	46.8
L.P. Gas	72	38.4
Utility Gas	1	.5
Ice	6	3.0
Kerosene	21	11.3
TOTALS	188	100.0

At which type of store did you buy it?

Type of Store	Number	Per Cent
Appliance	108	38.2
Hardware	44	15.5
Farm Implement	32	11.3
Public Utility	27	9.5
Personal Sale	14	5.0

Oil Station and garage	12	4.2
Chain store or mail order	11	3.9
Department	11	3.9
Furniture	6	2.1
Farm Sale	4	1.4
Farm Co-op	3	1.1
Locker Plant	3	1.1
I am a dealer	2	.7
Miscellaneous (no more than one vote each)	6	2.1
TOTALS	283	100.0

IF YOU WERE BUYING A NEW REFRIGERATOR NOW, would you choose one with a freezer storage compartment? We are asking about storage space in addition to ice cube tray space. Please tell us why.

Yes	Number	Per Cent
Yes	120	73.2
No	44	26.8
TOTALS	164	100.0

Those answering "Yes" to the above question gave these reasons for their choice:

Have a locker in nearby town—want space to hold food until needed	40
Need it for fresh food supply	28
Provide extra storage space	27
Save trips to town—more convenient	25
For small amounts which can't be used at once	16
Need to keep one week's supply frozen foods and have ice cubes	11
Would be handier	10
Saves opening big freezer in basement all the time	8
To store frozen foods until taken to locker	4
Economical	2
Buy in large quantities, freeze leftovers, etc.—home-grown fruits, etc.	2
To store wild game and fish	2
To use temporarily until can buy freezer	1
To replace presently owned freezer	1
It saves space	1
Take out a few days' supply of frozen foods and store in refrigerator, eliminate opening of freezer so much	1
Unless they could have a home freezer	1

Those who replied "No" gave these reasons:

Already have a home freezer	16
Prefer a separate unit	8
Have a locker in town	4
Farmers need more freezing capacity than that in a refrigerator	4
Refrigerator has sufficient freezing space	3
Could use home freezer just as well	3
Do not need freezing compartment	2
No future concerning refrigerators	1
R.E.A. is not dependable enough	1
It wastes electricity	1

The survey indicated that 84% of those who replied did not have home freezers. But the *Nebraska Farmer* encouraged "opinion" answers on some questions.

Whether or not you have a home food freezer, please tell us what size of freezer you believe would be the best size for your family needs. (Please check below.)

A. One freezer of cu. ft. storage space—OR—

B. Two freezers with storage capacities of AND cu. ft.

A. One freezer only:

Size In Cubic Feet	Number	Per Cent
500	1	.5
350	1	.5
200	1	.5
45	1	.5
30	1	.5
28	1	.5
24	2	1.1
20	11	6.0
19	3	1.7
18.5	1	.5
18	2	1.1
17	1	.5
16	9	4.9
15.8	1	.5
15.5	1	.5
15	18	9.9
14 to 20	1	.5
14	4	2.3
13	2	1.1
12.5	2	1.1
12	42	23.0
11.5	2	1.1
11	12	6.7
8 or 10	1	.5
10	11	6.0
9.2	2	1.1

9	10	5.5
8	16	8.8
7.5	1	.5
7	2	1.1
6 or 8	3	1.7
6	6	3.3
5	1	.5
4	8	4.4
Largest made	2	1.1
Large	1	.5
Medium	3	1.7
Small	1	.5
TOTALS	183	100.0

B. Two freezers by combination:

Size In Cubic Feet	Number	Per Cent
12 and 20	1	10.0
10 and 10	1	10.0
9 and 9	1	10.0
8 and 8	2	20.0
8 and 4	1	10.0
6 and 8	2	20.0
6 and 6	2	20.0
TOTALS	10	100.0

If both white and other colors were available, what color would you prefer?

Color	Number	Per Cent
White	181	95.3
Blue	3	1.5
Yellow	2	1.1
Red	2	1.1
Grey or Cream	1	.5
Green	1	.5
TOTALS	190	100.0

At which type of store did you buy your freezer?

Type of Store	Number	Per Cent
Appliance	23	48.0
Farm Implement	9	18.8
Hardware	5	10.4
Department	3	6.3
Automobile	2	4.1
Chain Store, or Mail Order	2	4.1
Misc. (No more than one vote each)	4	8.3
TOTALS	48	100.0

In conclusion, the survey made this comment: "Refrigerator and freezer manufacturers will be interested in any suggestion you may have for making their products better for farm use." Following are the comments on both freezers and refrigerators:

No knowledge concerning home freezers	9
Would prefer upright—saves space	5
Electricity is not dependable enough	2
Adjustable shelves	2
No need for home freezer	1
Every home needs one, preferably large size	1
A good feature is built-in fan in connection with motor	1
Living in sandhills—would like freezer large enough for whole beef and vegetables besides	1
Would like two doors—doors that would not crush small fingers that get in the way	1
Would like storage space on one end for store wrappings, locker boxes, etc.	1
Is it possible to build ice cream freezer in freezer?	1
There should be an upright model with hand holds that will go easily through doors and not be scratched	1
28-in. door—many farmers don't buy because of this	1
Am in market for freezer and interested in this report	1
Space to store 10-gal. cream can without freezing	1
Economical use of electricity	1
Automatic shut off to keep deadly gas from escaping	1
Simple repair and replacement of parts (all makes interchangeable)	1
Divides through the freezer to separate foods and save time	1
Why put luxury on them—they are not a luxury like television	1
Save time in running to locker by 6 o'clock, before it closes, with a few chickens I can bake more at once and freeze some	1
Should not be too deep (hard to reach). Perhaps freezing unit could be underneath	1
Upright model should have inner doors to prevent loss of cold	1
Better method of storing frozen foods—perhaps certain divisions with dates on top file would be convenient	1
Suggest having a light go on when door is opened and a signal alarm for when the temperature becomes too warm	1

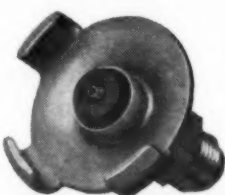
What the serviceman should know about "VIRGINIA" REFRIGERATION products

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Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Question & Answer On Ammonia

QUESTION:

I have an ammonia problem on which I would like your advice. This job is a York 3 x 3 D working on a high side float with surge drum, on a locker room held at -5° F.

About six weeks ago, the customer called and said that the unit was tripping out on high head, with the high pressure gauge registering about 180 lbs., even after the unit had been shut down for several hours.

I assumed, and I believe correctly, that there was air in the system. I purged it flat and the unit ran O.K. for two weeks, when we again received a call—same complaint.

Again I purged, but after doing so, the pressure built up from 0 lbs. to 220 lbs. within five minutes time and tripped out again. I purged it again and this time it ran O.K. Again this past week we received another call for the same complaint. I had to purge the condenser twice, just as previously, before it would run normally.

This unit has been in operation for six years and it never gave this kind of operation before. I am sure that it is air or non-condensable gas, because I can see air bubbles coming up through the water into which I am purging. I purge just as it should be purged, keeping the water flowing through the condenser while I am purging. Of course, I purge from the top of the condenser.

Where is this non-condensable gas coming from? I suspected a leak somewhere in the low side or through the shaft packing, but assuming that there is a leak on the low side, why doesn't the NH₃ leak out during the off cycle when the low side pressure builds up to about 20 lbs.? There are no apparent leaks. The unit was short on NH₃, and on the last call I added some.

The only thing I can think of is that the temperature of the gas gets up above its critical temperature of 271° F., but I don't believe so, as there is plenty of cold water available. Besides, I have cleaned the condenser.

Is it possible for NH₃ to break down? I have read somewhere that one authority claims NH₃ will break down, and another claims that it will not, that is, assuming normal head and back pressures.

The average pressures when the unit is in normal operation are 150 to 180 lbs. head pressure, and a suction pressure of about zero gauge, sometimes going into a slight vacuum.

I am really stumped on this one, and I would appreciate some help.

ANSWER:

In your letter, you mention that on your first call, the customer reported that the high pressure gauge read 180 lbs., several hours after the machine cut off on the high-pressure cut-out. The customer could have been mistaken; perhaps he confused the normal reading with the reading after protracted shut-down.

Assuming, however, that he was correct, the presence of non-condensable gas in the system is rather clearly indicated. Certainly 180 p.s.i.g. is too high for a static condition of the condenser, for 180 p.s.i.g. corresponds to a saturation temperature of the ammonia of about 94°, which seems unlikely.

WHAT NON-CONDENSIBLES ARE:

Non-condensibles in a refrigerating system, in particular an ammonia system, can consist of air, gases of decomposition of the ammonia or of the oil, or gases formed by some chemical reaction between the ammonia, oil, and moisture, on some material in the system.

Air is the most likely suspect. It is not unusual to find air in the smaller systems that have been "purged" when the system was installed instead of pumping a good vacuum on the system before the refrigerant is charged into the system. This apparently does not apply to your system, which operated successfully for six years with normal

head pressures of from 150 to 180 p.s.i.g.

Air can be drawn into a system through a leak or leaks on the low pressure side of the system. The fact that your system operates at a normal suction pressure of about zero gauge, going into a slight vacuum at times, makes it more than likely that there was and probably still is, a leak somewhere on the low pressure side of your system. The fact that the system was low on charge, seems to confirm this, although it may have been due to ammonia lost during purging.

You mention that you tested the system for leaks, but it is rather easy to miss a leak on the evaporator coil in a -5° room. It is usually well frosted, which makes it difficult to test. Moreover, it is difficult to get enough pressure in this cold coil, which is running at about -30° F.

Even though you made the leak test during the off cycle when the low side pressure is 20 p.s.i.g., a small leak, or worse, several small leaks, may be very difficult to find.

It is suggested that, with the compressor idle of course, you by-pass some condenser pressure into the low side and build up its pressure if possible to 50 p.s.i.g. This may enable you to locate some hitherto undetected leaks. Pay careful attention to the shaft stuffing box. It may leak with the flywheel in a certain position.

The evidence points toward a leak or leaks somewhere in the low pressure side of the system. You should make every effort to find them; or at least determine that, without question, there is no leak.

DECOMPOSITION OF AMMONIA

While there is a difference of opinion on whether a breakdown of ammonia occurs in a compression system, the general belief throughout the industry is that it does. Whether this happens below the critical temperature of 271.2° F. or whether a high enough temperature is attained by "wire-drawing" of the gas through the discharge valves, will be left to others more competent to judge.

Certainly, it is true that some non-condensibles can be purged from most ammonia systems from time to time. Ordinarily, the amount of non-condensibles formed within a couple of weeks would certainly not be in the quantity that you have found in your system.

Certain oils appear to give off non-condensable gases. If new oil was added to this system just prior to the start of the trouble, you would be wise to drain the crankcase and replace the oil with approved oil.

NON-CONDENSIBLE GASES FROM CHEMICAL ACTION

The nature of chemical actions are so varied that only a chemical analysis of the oil and refrigerant could point to any definite conclusions. However, such chemical actions can result in the release of gases that would not condense at the pressures and temperatures existing in an ammonia system, and would, therefore, appear in the system as non-condensibles.

It would be well to ascertain if there have been any changes made

in this equipment in recent months. For example, it has been reported that the galvanize coating of pipe that is galvanized inside, is attacked chemically, resulting in non-condensibles that persist over a period of several months. Perhaps some such thing may have happened.

A STICKING HIGH SIDE FLOAT

The high side float valve should be checked. If it has become corroded and sticks closed at times, it will result in a pump-down of the refrigerant from the low side. This will cause a low vacuum on the low side that will cause a great deal of air to enter if there are leaks in the low side.

In addition, the pump-down will load the condenser perhaps to the point, especially if some non-condensibles are present, to cause excessive head pressures.

The sticking of the float, if it does occur, may be due to corrosion or mechanical condition, or it may be "gas bound." Even a small amount of non-condensibles, insufficient to be noticeable on the gauge, can gather in the float chamber and prevent the entrance of liquid from the condenser, so the float cannot open.

It is common practice to use a small purge tube from the upper part of the float chamber to the surge drum or elsewhere in the low side. This small line may be restricted or stopped up with scale, preventing purging of the float chamber and resulting in gas binding.

AIR LEFT IN THE LOW SIDE

The fact that although you hand purged the condenser heavily, you soon got excessive head pressure, seems to indicate that the low side was full of non-condensibles which gathered in the condenser when you started the compressor again, adding support to the supposition that there is a leak somewhere on the low side of the system.

Hand purging is rarely effective. It usually has to be repeated several times at intervals, in order to remove most of the non-condensibles. Even then it is not dependable, and quite often a great deal of non-condensibles are still left "scattered" throughout the system.

It must not be supposed that they all gather in the condenser, and can be removed by purging the condenser once. Eventually they do tend to gather there, and eventually about all of them can be purged out, but it takes a lot of time, and persistence, and results in the loss of a large portion of the charge of refrigerant.

AUTOMATIC PURGER SUGGESTED

Although this is a small system, it might pay to consider the installation of a refrigerated drum-type, automatic purger. It would keep the system free of non-condensibles, and reduce the operating cost.

You are doubtless familiar with this device, which is made by several companies. It is easy to install and, as you know, is quite common on the larger systems.

The above suggestions are based on the premise that non-condensibles with or without being aggravated by a possible sticky float, are the chief source of the difficulty; also that the 180 p.s.i.g. head pressure as reported by the customer, was correct. Everything points to the probability of his being right.

If, on the other hand, the head pressure fell to say 135 p.s.i.g. or thereabouts during the off-cycle, the possibility of a restricted or dirty condenser or of excessively warm supply water, must be considered. Your reference to cleaning the condenser would seem to eliminate these possibilities, however.

TYPHOON

Most Complete Line of
AIR CONDITIONERS
in the most popular size range
1½ TO 20 TONS

Evaporative Condensers
3 TO 20 TONS

Backed by more than 40 years
of air cooling experience



TYPHOON Air Conditioning Co., Inc.
794 Union Street, Brooklyn, N. Y.

United
FOR *Quality*
AND *Economy*

KOOLMASTER DIRECT DRAW

Engineered to serve beer to the "Brewmaster's" taste. Its smart appearance enhances any establishment. Choice of 8 models in stainless steel or brown Dulux finish.



DRY KOOL BOTTLE COOLER

World famous for performance and design. 14 models to meet all requirements in stainless steel or brown Dulux finish.



REACH-INS

Modern flush fronts with recessed handles in popular sizes. Ten models to choose from. Available in white Dulux, stainless steel fronts and glass doors.



KUBEMASTER ICE CUBE MAKER

Whenever food or refreshment is served, ice cubes as you need them. Choice of 3 beautiful models.



UPRIGHT FREEZER 15 Cubic Feet

Scientific placement of cooling coils, two separate food compartments, dual doors to minimize cold loss, insure balanced freezing at minimum cost.



DESIGNED—ENGINEERED—MANUFACTURED
By
UNITED REFRIGERATOR COMPANY

Locust and Walnut Sts.
HUDSON, WISCONSIN

McCord

CONDENSERS

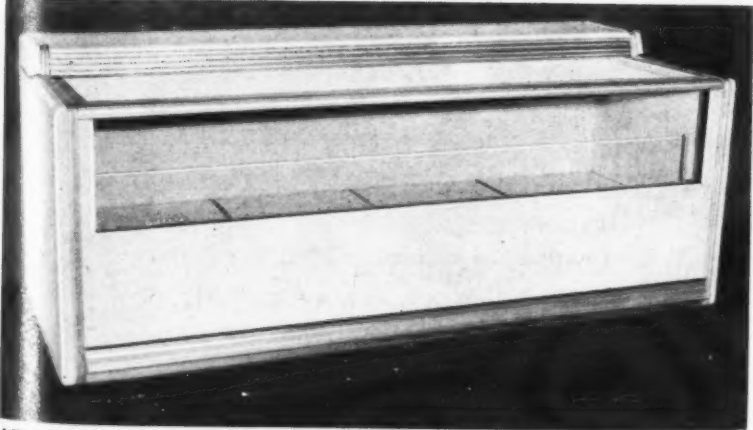
NO JOINTS
MAXIMUM HEAT TRANSFER
COPPER BRAZED
FULL SIZE BENDS • NO JOINTS
COMPLETE RANGE OF SIZES
VARIOUS FIN WIDTHS

**UNDERWRITER
APPROVED**

UNDERWRITERS APPROVAL INSURES A
SATISFACTORY PRODUCT IN SERVICE.
Write for Engineering Information

**McCord
CORPORATION**
DETROIT

Warren Makes Big Stride In New Freezer



ATLANTA, Ga.—After many months of extensive laboratory and field testing, The Warren Company announces a new 8-ft. frozen-food display case, Model LO-8. Even fruits and juices with high sugar content are kept firm and in finest quality by the sub-zero tempera-

tures of the LO-8. Its capacity of 612 packages is, indeed, exceptional, and practically this entire display is visible through the extra-wide four-glass Thermopane display front.

For further information, write to THE WARREN COMPANY, Inc., P. O. Box 1436, Atlanta 1, Georgia.



Smart servicemen don't take kindly to makeshift controls—not when they know they can rely on Ranco for the right control for any refrigeration job. Whether you're working on a commercial installation, a household refrigerator, a water cooler, or a milk cooler, your Ranco wholesaler has the replacement control you need.

And Ranco—the world's largest manufacturer of refrigeration controls—has increased plant capacity, to meet the constantly increasing demand for genuine Ranco controls.

REPLACE IT RIGHT WITH RANCO

Want to know which control to use? This book gives you a quick answer. See it at your Ranco wholesaler's.



Ranco Inc.
COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

SLANTS on Service

"Slants on Service" is a new "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business.

Let Equipment Warm Up

To Room Temperature First

When bringing compressors, coils, or tubing parts from a cold location to a warm one, don't install them on the system immediately. It's better not to open them up even until they have warmed up to room temperature.

Moisture will condense on cold surfaces, so parts or tubing should be at room temperature or above to avoid condensation and thus adding moisture to the system unnecessarily.

Be Cautious In Cleaning

Fixture with Water Hose

Never use the full force of water pressure in cleaning a refrigerated fixture with a water hose. This may force water up behind overlapping panels and into insulation, warns John Spence, Hussmann service manager.

Always turn off the lights in a fixture before cleaning because failure to do so may result in an electrical short and burned-out wiring, or a severe shock or death.

Carrier Describes First Cost, Operating Economy Of Absorption Unit

CHICAGO—How savings in first cost and operating expense are obtained with Carrier Corp.'s absorption refrigeration machine was described in detail recently before the Chicago section of the American Society of Refrigerating Engineers at the Builders Club here.

O. E. Gammill, manager of compression equipment for Carrier, stated that with low pressure steam, the absorption unit uses almost 50% less steam per ton of refrigeration than comparable turbine driven compressors.

Specific operating cost advantages may be found for the new machine wherever cheap steam or a cheap source of heat for steam is available, Gammill said.

Among first cost factors, Gammill cited its lightness in weight and lack of vibration which permit rooftop installation without the need for heavy, expensive foundations. Economic advantages of rooftop location include a major reduction in condenser water piping.

In planning new buildings steam boilers may also be located on the roof, freeing the basement for rental use, and eliminating the entire problem of space-consuming smokestacks.

Gammill estimated that a five by five ft. stack in a 20-story building, with space renting at \$5 per square foot, would cost \$1,500 per year in lost rental, or \$30,000 over 20 years.

Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

Bastian-Blessing Catalog For Fountain Operator

KEY NO. M-830

CHICAGO — A new illustrated catalog describing equipment with which a fountain operator can serve cold food "quickly and economically" has been published by The Bastian-Blessing Co.

It features a number of sandwich units, ranging in length from 2 to 5 ft., in standard models for wall or front counter installation. A new refrigerated display case with three shelves is shown; also a refrigerated backbar base with a cold pan top in which ingredients for salads and sandwiches are refrigerated and displayed simultaneously.

Costs, selling prices, and profits on a number of standard cold plates and salads are shown.

New Bi-Monthly Bulletin Published by Pines

KEY NO. M-831

AURORA, Ill.—A new bi-monthly news bulletin for production, engineering, and maintenance executives in the metalworking field is announced by Pines Engineering Co., Inc. here, manufacturer of automatic and semi-automatic hydraulic bending machines and tube and rod end-finishing equipment.

The new bulletin features bending and end-finishing techniques, provides tooling data on outstanding jobs, details on new developments and bending applications, and facts concerning short-cut production methods.

Timely tips on bender maintenance are also carried to help users avoid break-downs.

Of standard file size, punched to fit a three-ring binder, the new bulletin is illustrated and printed in two colors.

Brochure Describes Igloo Horizontal Speed Freezer

KEY NO. M-832

BLACKPOOL, Eng.—A brochure describing the Igloo horizontal speed freezer that can produce from 12 to 18 gals. of soft ice cream per hour has been published by Igloo, Ltd. here.

The brochure gives complete specifications, pictures the freezer, lists the refrigerating units which may be used with it, and describes its operation.

Allegheny Ludlum Publishes Stainless Steel Handbook

KEY NO. M-833

PITTSBURGH—A new data handbook on the stainless steels has been published by Allegheny Ludlum Steel Corp. and is now available for free distribution to users of the heat and corrosion resistant metals.

In order to fill the growing needs of fabricators and design engineers for more complete on-the-job reference data, material contained in previous handbooks has been completely rewritten and categorized and much additional information was added.

In its 120 pages the cloth-bound volume discusses approximately 40 different types of Allegheny Metal stainless steel and covers each type from standpoint of analysis, fabrication, heat treatment, and special conditions of service.

The first of seven chapters in the book is concerned with selecting the proper type of stainless for a given application. A selector table containing about 30 types, including both nickel-chromium and straight chromium steels, lists about 40 properties broken down in the general classifications of physical data, electrical properties, heat resistance, working and treating temperatures, mechanical properties, and creep strength. A second group of tables in this chapter lists the corrosion resistance of the steels to the various media, including organic substances.

Trane Co. Issues Bulletin On Quench Oil Cooling

KEY NO. M-834

LA CROSSE, Wis.—Systems which metalworking plants can use to increase quality and quantity production in heat treating are outlined in a new bulletin on evaporative cooling of quench oils, published by The Trane Co., here.

The bulletin tells how cooling and circulation of quench oils assures scientific control and saves time by continuous operation, in addition to reducing oil losses and fire hazards.

Trane evaporative coolers are especially adaptable where there is a shortage of water, where water is high in cost or temperature; dirty, hard or corrosive, or where the use of large quantities of water is restricted.

Included in the bulletin are suggestions for control of quench oil cooling systems, and selection, capacity and dimension data. Write for bulletin D-350-2 from the Trane Co.

Smith Offers Water Heater Sales Promotion Packet

KEY NO. M-835

KANKAKEE, Ill.—A "profitunity promotion packet" that offers a complete sales promotion program ranging from direct mail to TV spot announcements on Smithway water heaters is being offered to dealers by the A. O. Smith Co. here.

The packet lists or illustrates all items in the program and includes such items as specification sheets on the complete line, dealer identification and demonstration materials, newspaper mats, the company's advertising schedule, and an outline of the firm's cooperative merchandising program. All items in the packet are eligible under this program.

LOOK to LARKIN For Efficiency



LARKIN HALF-TURRET HUMI-TEMP

Efficient operation makes a product easier to sell on one hand; builds solid customer satisfaction on the other. Precision engineering—only the best materials—skilled craftsmanship—and almost 25 years experience in commercial and industrial refrigeration—all add up to higher efficiency for every Larkin product. And this means lower operating costs—important to buyer and seller alike.

Manufacturers of the original Cross-Link Coil—Humi-Temp Units—Evaporative and Air Cooled Condensers—Air Conditioning Units and Coils—Direct Expansion Water Coolers—Steel Vacuum Plate Coils—Heat Exchangers.

WATCHDOG OF THE NATION'S FOOD SUPPLY

LARKIN COILS

319 MEMORIAL DR., S.E. ATLANTA, GA.

Stores More in Less Space... Cools Faster!

Speed-Freeze

bottle beverage coolers

write

IDEAL COOLER CORPORATION
2953 EASTON AVE., ST. LOUIS 6, MO.



Stainless Steel Refrigeration

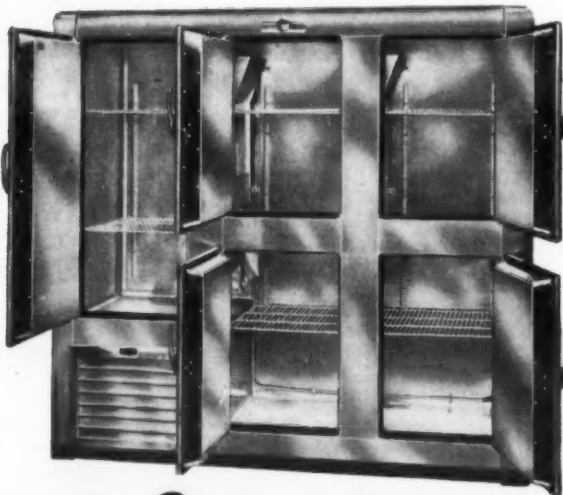
Built for Service

Vimco means quality! Advanced engineering plus skilled craftsmanship make Vimco the choice for top performance — top satisfaction.



Model DRS-70-3

Dough Retarder or Salad Refrigerator
Available from 42 to 98 cu. ft.
Remote and Self-Contained



Model RS-60-S

Available from 20 to 65 cu. ft.
Remote and Self-Contained

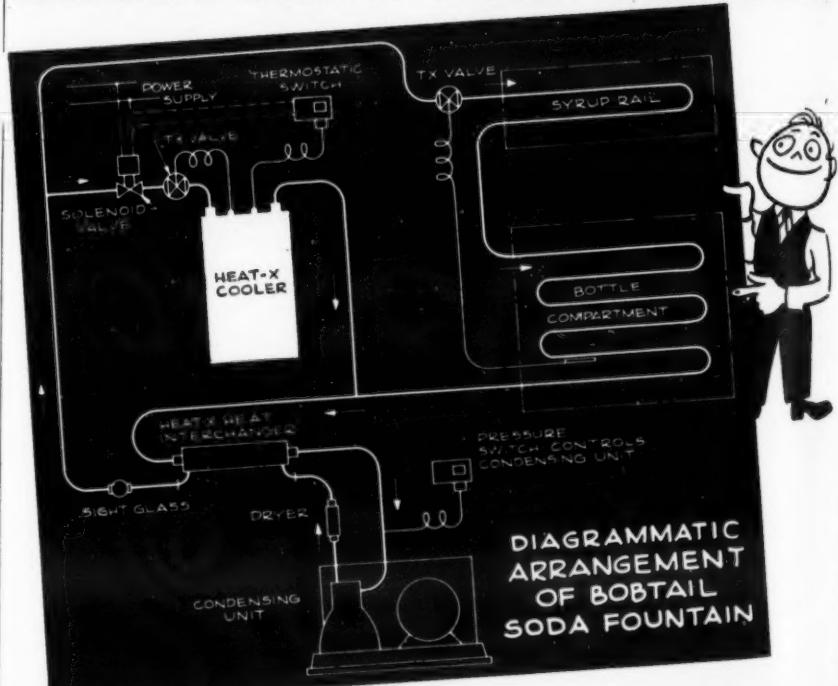
Pioneers of Stainless Steel Refrigerated Cases
For complete information write for catalog



VICTORY METAL MANUFACTURING CORP.
1300 SOUTH FRONT ST.
PHILADELPHIA 47, PA.

DISTRIBUTORS IN ALL PRINCIPAL CITIES

BLUEPRINT FOR PROFIT



heat-x FOUNTAIN COOLER

The simple, common-sense construction of Heat-X Fountain Coolers insures minimum maintenance and positive protection against freeze-up damage. Cast within the aluminum block are (1) a stainless steel coil for soda, (2) a copper (or stainless steel) coil for water, and (3) a copper coil for refrigerant. No surge tank or oil separator is required. The hook-up for a bobtail soda fountain is shown in the diagrammatic sketch above.



Write Dept. SE for Specification Sheet

THE HEAT-X-CHANGER CO., INC.
BREWSTER, NEW YORK



LOCATIONS of compressor (above motor) and condenser (behind grille) in Cadillac for Argentine government are indicated by Kenneth Whitlock.



BLOWER UNIT takes minimum of space in luggage compartment in system that Whitlock has designed over many years of air conditioning automobiles.



COOL AIR is delivered upward behind rear seat in this design. Janet Leckner notes the appreciable temperature difference in the air coming from the unit.

Argentina Orders Air Conditioned Cadillac With Refrigerated Compartment, Bar, and TV

BIRMINGHAM, Mich.—One of the most elaborately fitted automobiles that Kenneth E. Whitlock of the Kool-Kar Co. has equipped with air conditioning during his long-time specialization in this field is the new 7-passenger Cadillac limousine ordered by the Argentine government, presumably for Peron.

Besides air conditioning, the car will have television, two-way telephone, a refrigerated food compartment, and a bar. It will likewise be bullet-proofed with armor plate and special glass.

Refrigeration for the air conditioning system is supplied by a two-cylinder compressor mounted under the hood above the car engine and belt-driven off the engine crankshaft. The pump is nominally rated at 2 tons capacity at 1,150 r.p.m. Large capacity condenser is located in front of the car radiator directly behind the grille. A receiver tank is also mounted near the engine compartment under a front fender.

Lines from the high-side of the system run back beneath the car to the coil and air-handling unit compactly mounted in the luggage compartment of the car. This occupies only about one quarter of the trunk space, due chiefly to the special design of the coil, according to Whitlock.

Conditioned air is delivered to the car interior through two small grilles discharging upwards directly behind the rear seat. Two small fans are used, each of which can be operated at three speeds—low, minimum, and high. Since the fans are controlled independently from the dash, considerable flexibility in temperature control is possible, Whitlock indicates.

"Running at full speed, the system delivers 440 c.f.m., which gives two complete air changes a minute, all outside air," he says. "No provision is made for exhausting air since there is sufficient air loss through cracks as the car moves. Air

intakes on Cadillacs are on the lower part of the trunk just above the bumper. Replaceable filters are used to clean the incoming air.

"On a 95° F. day, the system will provide a temperature drop of 10° to 12° and considerable humidity reduction. We also advise equipping cars to be air conditioned with green-tinted, heat resistant glass," he adds. "In this way no insulation need be added to the car body. This type of glass will reflect 28% of the sun's heat."

Tests have shown, Whitlock adds, that with the windows closed a car standing in the sun will quickly reach temperatures as high as 150° due to heat transmission through glass and metal body.

The Kool-Kar air conditioning such as installed in the Argentine govern-

What D'ya Know?

What did you see in this issue? Try your memory on these clues about news and advertising. If you get the answer on the first clue, score 5; second clue, score 3; final clue, score 1. Excellent, 25-30; Good, 18-24; Fair, 12-17; below 12, Poor.

1. a) "Two drinks for the cost of one" is this manufacturer's slogan. b) Water coolers are made in Columbus, Ohio. c) A thirsty man will look for an oasis.
2. a) Five freezers, nine electric ranges, 21 television receivers are in this new line. b) Refrigerators will be announced in September or October. c) They will carry the Sheldor trade name.
3. a) It's brand new. b) Binghanton, N. Y. firm introduces glass front display case. c) Comes in 10-cu. ft. and 16-cu. ft. sizes under BTC trade name.
4. a) Meat packer gives tips on

pre-packaged meats. b) Tables show data on storage, display temperatures, and proper packaging. c) Discussion by George T. Carlin held at Super Market Institute.

5. a) What size cold plates do you need? b) Brooklyn company says it can "job tailor" them. c) Street address is same as company name.

6. a) Two service suggestions contained in regular NEWS feature designed for service and contracting firms. b) Let equipment warm up to room temperature first. c) Be cautious in cleaning fixture with water hose.

Answers: 1. Ebco Mfg. Co., Inc. 2. Crosley line story. 3. 1. 3. Brewer-Titchener Corp. 4. 4. Swift & Co. story. 5. 8-9. 6. Dean Products, Inc. 18.

ment car operates the coil at 40° to 44° with air leaving the coil at about 5° to 6° above the actual temperature of the coil, according to Whitlock.

Because outdoor conditions can vary so rapidly as the car travels, and also because there's little or no time lag before the changes in outdoor temperature are transmitted to the interior of the car, a by-pass arrangement is necessary since the compressor operates as long as the car engine is running. Varying speeds of the car engine and subsequently the compressor also require some method of by-pass at high speeds.

A special hookup involving a constant pressure valve provides the by-pass necessary for these operating conditions.

The car for the Argentine government will also have a refrigerated food and ice tray compartment. This is powered off the same refrigeration system which handles the air conditioning, and will be installed after the television set are in place.

Whitlock, who has specialized in automobile air conditioning since before the war, says he is now working with Cadillac, Chrysler, Packard, and Buick and has shipped quite a number to Rolls-Royce in England.

Air-flow test using a flowrator to check uniformity.



for precise refrigerant flow control...

ANACONDA restrictor tube

Numerous exacting standards—you'll find them listed below—control the manufacture of every ANACONDA Restrictor Tube. But ability to control, or meter, refrigerant flow within the narrowest limits is the most important to us—and to you.

To meet your specified flow require-

ments, not only is tube I.D. held to a tolerance of $\pm .001$ " or closer, but every tube is individually air-flow tested on a flowrator to guarantee fulfillment of your specifications.

This and all the other safeguards behind the manufacture of ANACONDA Restrictor Tubes are nothing new with

us—simply the most conscientious manufacturing care and unrelenting, eagle-eyed inspection.

For full details about the fine engineering features of ANACONDA Restrictor Tubes for your refrigeration products, write to The American Brass Co., Waterbury 20, Connecticut.

These are the standards to which every ANACONDA Restrictor Tube is manufactured.

Precise flow control by flowrator test
Uniformity of I.D.
Uniformity of temper
Bright, clean and dry interiors

Precision-made for refrigeration

ANACONDA[®] RESTRICTOR TUBES

TAKE A LOOK AT LA CROSSE

SCULLERY SINK

NEW LOW PRICE

It sells better because it's made better. The La Crosse Scullery Sink is the sturdiest, most complete on the market. Made of 16 & 18 gauge galvanized steel it can be furnished with or without 1 or 2 wing drains. Available in models 18" x 56" overall or 18" x 38" overall, with or without gas burner.

AND YOU SEE A PLUS VALUE

Consistent high quality of materials and workmanship

STAINLESS STEEL DRAINBOARDS

When you sell La Crosse drainboard equipment you can be sure you're selling the best. The entire line of standard and custom built drainboards are Test Proven. Available in a wide variety of models and sizes they're STAND OUT VALUES AT LOW COST.

LA CROSSE COOLER CO.

301 Losey Blvd., So.

La Crosse, Wisconsin

EXPORT REPRESENTATIVES

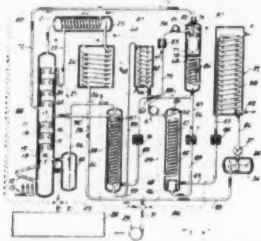
Melvin Pine & Co., 80 Broad Street, New York, N. Y.

Cable Address: Eximport

PATENTS

Week of May 8 (Cont.)

2,552,071. ABSORPTION REFRIGERATION APPARATUS. Earl B. Terrill, Jr., Evanston, Ill., assignor to Mills Industries, Inc., Chicago, Ill., a corporation of Illinois. Application Sept. 11, 1947, Serial No. 773,358. 7 Claims. (Cl. 62-119.)



1. In an absorption refrigeration apparatus which includes a generator, a condenser, an evaporator, and an absorber: a device for transferring strong refrigerant solution from the absorber (low pressure) side of the apparatus to the generator (high pressure) side thereof, comprising a transfer vessel, a conduit for conveying strong solution from the absorber to said vessel, a conduit for conveying refrigerant vapor from the generator to said vessel, a movable valve member at the inlet to said vessel from said vapor conduit, a conduit for conveying strong solution from the transfer vessel to the generator, a float control for said valve arranged to open the same when the liquid level in said vessel reaches a predetermined height and the pressures on opposite sides of said valve are equalized, and to close said valve when the liquid level in said vessel drops to a predetermined point due to the transfer of the solution from the vessel to the generator, a conduit extending from a point on the high pressure side of the system to the absorber for continuously conveying weak refrigerant solution to said absorber, a flow restrictor in said last-mentioned conduit, and means including a conduit extending from a point on the high pressure side of the system to said transfer vessel and a flow restrictor in such conduit, for introducing weak refrigerant solution into said vessel upon the closing of said valve and subsequent reduction in pressure in the vessel due to absorption of vapor therein by the solution remaining in such vessel, said last-mentioned flow restrictor being of such relative size with respect to said first-mentioned restrictor as to permit flow of vapor therethrough at a more rapid rate than that at which the weak solution is conveyed to said absorber, whereby refrigerant vapor in said vessel will be absorbed more rapidly than in said absorber and the pressure in said vessel will be reduced to a greater extent than

in the absorber to cause said strong solution to flow from the absorber into said vessel and to be returned to the generator upon the consequent opening of the valve, the pressure in said transfer vessel being thus caused to alternately correspond to the absorber pressure (at which time strong solution flows into such vessel from the absorber) and to the generator pressure (at which time such solution flows from said vessel to the generator).

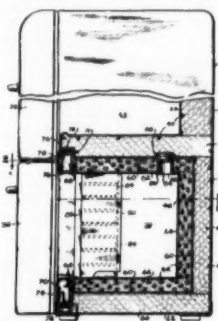
2,552,084. WORKING FLUID FOR A COMPRESSION REFRIGERATION SYSTEM. Alfred E. Bishop, Oakwood, and Stanley V. Cook, Dayton, Ohio, assignors to General Motors Corp., Dayton, Ohio, a corporation of Delaware. No drawing. Application Sept. 21, 1946, Serial No. 698,428. 7 Claims. (Cl. 252-63.)

1. A working fluid for a compression refrigerating system consisting of as its major constituents a halogenated aliphatic hydrocarbon refrigerant containing not more than two carbon atoms in the molecule and a mineral oil lubricant, and as its minor constituent an organic oxide inhibitor of the epoxy type in an amount equivalent to not more than 5% of the refrigerant in the system having the following structural formula:



in which "R" and "R'" represent a hydrogen atom, a methyl, ethyl, butyl, propyl, phenyl group with the total number of carbon atoms in R and R' exclusive of the phenyl group not exceeding 4.

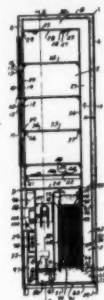
2,552,345. REFRIGERATING APPARATUS. Lawrence A. Philipp, Detroit, Mich., assignor to Wash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application July 24, 1947, Serial No. 763,185. 2 Claims. (Cl. 62-117.3.)



1. Refrigerating apparatus comprising, a cabinet casing, a liner within said casing forming a storage compartment having a rear wall opposite an access opening to the compartment, a door closing said access opening, a refrigerant evaporator in heat conducting relationship with said liner on the outer surface thereof, a sealing casing enclosing said liner and evaporator within said cabinet casing, impermeable heat breaker strips spanning adjacent edges of said liner and sealing casing at the door opening, heat

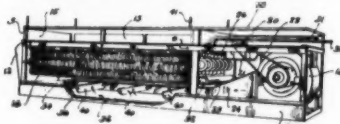
insulation interposed between said cabinet casing and said sealing casing, heat insulation interposed between said sealing casing and said liner imbedding said evaporator, and a passage adjacent said rear wall through both said liner and said sealing casing communicatively connecting the space between said cabinet casing and sealing casing with said storage compartment.

2,552,387. STORAGE CABINET HAVING HUMIDITY AND TEMPERATURE MAINTENANCE APPARATUS THEREIN. John S. Whinery, Kansas City, Mo. Application Aug. 11, 1947, Serial No. 768,002. 5 Claims. (Cl. 34-46.)



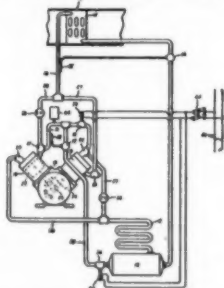
1. In a device of the character described, a cabinet formed of insulated front, rear, top, and side walls, a bottom wall, panels in the cabinet and spaced from the top, rear, side, and bottom walls forming passages therebetween, said panels defining a material treating chamber in the cabinet, perforated shelves arranged in the chamber in spaced vertical relation, doors pivotally mounted on the insulated front wall for providing access to the chamber for insertion of material to be treated therein, said top and bottom panels having apertures therein for movement of air upwardly through the chamber to the passages above the chamber, an air conditioning housing in the cabinet below the bottom wall and having an air inlet and an air outlet adjacent opposite sides thereof, means connecting the lower portions of the passage in the cabinet between the rear wall and rear panel with the housing inlet, a supply of water in the bottom of said housing, a foraminous filter in said housing between the inlet and outlet thereof and extending transversely of the flow of air therebetween and from below the water level whereby substantially all air moving from the inlet passes through said filter, means for heating the water in the housing, control means responsive to temperature of the water in the housing for regulating the water heating means, means including a water tank above the filter for flowing water downwardly through said filter for contacting and saturating the air passing therethrough, means adjacent the housing outlet for heating the saturated air, control means responsive to temperature of the air passing through the housing outlet for regulating the air heating means to control the temperature and humidity of the air, means connecting the housing outlet with the passage between the bottom wall and bottom panel for delivery of conditioned air to the material treating chamber, and means including a fan for effecting circulation of air through the chamber and housing.

2,552,396. FORCED AIR COOLING APPARATUS. August J. Brandecker, Chicago, Ill. Application May 18, 1949, Serial No. 93,859. 3 Claims. (Cl. 62-129.)



1. In a cooling unit of the type adapted to be suspended from the ceiling of a refrigeration chamber and composed of a rectangular housing containing a refrigerating unit disposed toward one end of said housing and a blower disposed toward the other end and means for conducting air from the blower end under said refrigerating unit and upwardly thereover, the combination of longitudinally spaced deflectors under said refrigerating unit to distribute and to deflect the air uniformly over said refrigerating unit, a drip pan under said deflectors, said drip pan spaced above the floor of the housing, and insulation between the drip pan and said floor to prevent cooling of the floor by drip water.

ABSTRACTS
152,455. TWO-RANGE REFRIGERATING SYSTEM. Wayne E. Dodson, Caldwell, N. J., assignor to General Electric Co., a corporation of New York. Filed March 28, 1950. Published May 8, 1951.



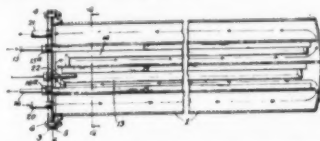
This application discloses a reciprocating refrigerant compressing unit 10, including two cylinders 18 and 19, hav-

ing pistons 24, 25 and crank shaft 26. The cylinders are arranged to be connected either in parallel or in multistage. The parallel connection is by branch lines 27 and 28 from suction line 16 leading from evaporator 13 in air duct 17. Cylinder 18 discharges into conduit 29 and cylinder 19 into conduit 30. Conduits 29 and 30 discharge into condenser 11 which feeds into receiver 12. Expansion valve 14, under control of bulb 15, feeds evaporator 13.

The multistage connection is secured by providing a by-pass 31 from the discharge connection 22 of cylinder 18 to the intake connection 21 of cylinder 19, together with check valves 34 and 35 to prevent reverse flow in the normal discharge conduit 29 of cylinder 18 and in the normal intake conduit 28 of cylinder 19, respectively. The by-pass 31 is opened for multistage operation by solenoid valve 32, 39 under control of switch 43. The arrangement is applicable to compressors having more than two cylinders in which case the surge chamber 44 connected in the by-pass line is more important to minimize fluctuating pressures during multistage operation. Introduction of liquid refrigerant from receiver 12 to the by-pass 31 may be effected by solenoid valve 36, 40 simultaneously with the opening of the by-pass to provide interstage cooling. Power lines 41 feed switch 43, which may be under manual, thermostatic, or pressure control. The valve 37 in conduit 35, controlled by thermal member 38 in heat exchange with by-pass 41, regulates the feeding of liquid refrigerant into the by-pass.

Week of May 15

2,552,635. HEAT EXCHANGER FOR COOLING LIQUIDS. Herman W. Kleist, Chicago, Ill., assignor to Dole Refrigerating Co., Chicago, Ill.

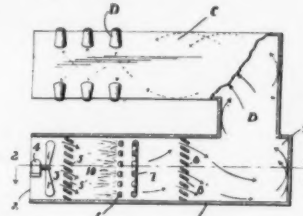


1. In a heat exchange member for cooling fluids, a tubular housing having a closed end and an open end, a closure removably secured to the open end, a liquid inlet duct on said closure, a liquid outlet duct on said closure, each duct being in communication with the interior of the housing, and means for constraining the liquid in said housing to move through a tortuous path of substantial length, including a plurality of cold plates connected in a unitary assembly, said assembly, including said cold plates, tubes connecting said cold plates, and said closure with its inlet and outlet ducts, being connected for bodily insertion into and removal from said housing, said plates defining with said housing and closure, a tortuous passage from said liquid inlet duct to said liquid outlet duct.

2,553,121. AIR CONDITIONING APPARATUS. Rush D. Tounton, Wynnewood, Pa.

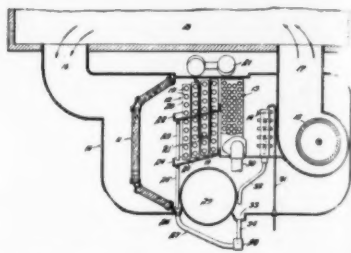
Apparatus for the conditioning of air with respect to temperature and relative humidity, which comprises an elongated casing having an inlet for air in one

end and an outlet for air spaced from the end thereof opposite the inlet, a fan positioned adjacent the inlet for flowing air through the casing, means within the casing beyond the fan for the supply



successively of free moisture and then of heat to air flowing through the casing, a series of angularly arranged baffles extending vertically in the casing and positioned between the means for the supply of heat and the outlet opening an elongated chamber extending in substantial parallelism with said casing, outlet openings in said chamber, an inlet opening in the chamber at one end and a conduit connecting said inlet opening with the outlet opening in the casing.

2,553,143. METHOD OF AND MEANS FOR REMOVING CONDENSATE FROM COOLING ELEMENTS OF AIR CONDITIONING SYSTEMS. Lowell McNelly, Evansville, Ind.



1. An air cooling system comprising an air duct, a cooling element within said air duct, means for supplying a refrigerating medium to an upper portion of the cooling element for series flow downward therethrough, and means positioned intermediate an upper and lower portion of said cooling element for removing any condensate that forms upon the upper portion of said cooling element at substantially the same temperature at which it is formed.

(To Be Continued)

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PRESSURE and THERMOSTATIC

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455 W. 19 St., N. Y. 19, Watkins 4-4302

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\$25,000.00

I represent a client who desires to purchase patent rights in a system for automatic defrosting of fin coils used in forced-convection low-temperature refrigeration units. The method employed must be simple, and the apparatus required must be inexpensive and mechanically sound. Our requirements are for refrigeration units up to 5 h.p.

As much as \$25,000.00 will be paid for exclusive rights, depending upon the commercial value of the system as applied to our requirements, and the results of our patent investigation. Reply in writing only, and please give full information.

FOORMAN L. MUELLER—Patent Attorney

105 W. ADAMS ST., CHICAGO 3, ILL.

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8-20-51

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RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

SALES MANAGER—New York area—desires connection with recognized manufacturer. Graduate engineer having 20 years' sales experience on refrigeration, air conditioning, heating, heat exchangers, and control equipment. BOX 3793, Air Conditioning & Refrigeration News.

RESPONSIBLE, YOUNG sales-serviceman: Desires permanent position in the industry. Prefers factory, distributor, or major appliance outlet as field service or sales representative. College, refrigeration school graduate, family man with 8 years commercial refrigeration and appliance service. 5 years commercial & household sales experience. Your offer will receive serious consideration. Reply to BOX 3794, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

MANUFACTURER OF ice cube trays and door gaskets is looking for sales agent having contact with jobbers and manufacturers. BOX 3795, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

BARGAINS ON well known air conditioning coils. Ten, twenty, and twenty-five tons. These cooling coils have eleven copper fins per inch and are hydrogen welded to copper tubes. Write for price sheet. AIR CONDITIONING ENGINEERING CO., 2116 Locust Street, St. Louis 3, Missouri.

CONTINUOUS FROZEN custard machines—famous make. Uncle Sam tapped me on the shoulder—I had to close my business—must sell at sacrifice prices. Two brand new in factory crates, others used but work perfectly. Baby coming—need cash! Write LT. PHILIP J. BERNHEIM, 776th AC&W Squadron, Point Arena, California.

GOVERNMENT SURPLUS. Original prominent brand fiberglass filters 15" x 20" x 2" will fit in 16" x 20" x 2" frame. .60¢ each, in lots of 50—50¢, 100—45¢, 500—40¢. F.O.B. N.Y. Z. CASTOR, 1 Sickles St., N.Y. N.Y.

1/4-HP open and sealed type prominent brands condensing units complete: brand new; limited quantity; act now; \$52. each FOB New York; write for specifications. Other sizes also available; MANN REFRIGERATION SUPPLY CO., 15 Astor Place, New York 3, N.Y.

PITTSBURGH ELECTRODRYER, Model AAC-50, serial No. 7798. Has been used for only five months and is in first class condition. Price, \$500.00. PERLICK BRASS COMPANY, 3110 W. Meinecke Avenue, Milwaukee 45, Wisconsin.

EXCESS INVENTORY: Not required for present production schedules consisting of motors, starters, fittings, controls, pulleys, ammonia compressors, etc., available subject to prior sale at manufacturer's cost or below. Excellent buys for those who act quickly. REFRIGERATION ENGINEERING CORPORATION, 2020 Naudain Street, Phila. 46, Pa.

FOR SALE—while they last—standard makes—new hermetic units—static & fan-cooled cond. 1/4, 1/2, 3/4, 1, 1 1/2. Open Units—1/4—1/2. Relays—1/4—1/2—1/4—1/2—also overload protectors. #673 Methyl T.X.V. Capacitors in jet-black steel case 180-240 mfd. Small hermetic driers. 1/4" fl.—1/4" overall Driers. Household Cold Control—w/Knob & plate. Also other parts and supplies. Send for our latest list and prices. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln Ave., Chicago, Ill.

SALE—ROOM coolers. Big name, top brand 1/2 HP window air conditioners, all new 1951 models, 5 year warranty, \$29.00 each. Reply BOX 3782, Air Conditioning & Refrigeration News.

MISCELLANEOUS

NORGE SEALED units remanufactured and exchanged. Immediate delivery from stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, \$1.15 plus postage. MODERN REFRIGERATION CO., Inc., 12541 E. McNichols Road, Detroit 8, Michigan.

INCREASE YOUR earnings—get this amazing booklet which shows you how to "Crack Sales Resistance." Learn confidence, approaches, overcome sales skills, learn to close that sale. Send \$1.00 at once. PROMOTIONS UNLIMITED, 1948 Merrilbrook Rd., Phila. 31, Pa. Limit 2 to a salesman.

WE WILL BUY!

**EXPANSION VALVES
SOLENOID VALVES, ALL TYPES
REF. FITTINGS and PARTS**

ANY QUANTITIES • MUST BE NEW

Write, Phone Or Call For

IMMEDIATE ACTION

TRACO Industrial Corp.

455 W. 19 St., N. Y. 19, Watkins 4-4302

(Send for Traco's complete list of sensational bargains)

Carrier Installs Largest Air Conditioning System Outside U.S. In Chile

SYRACUSE, N. Y.—A huge new office, apartment, radio, and theater building in Santiago, Chile, will be air conditioned by means of the largest Carrier absorption refrigeration plant yet to be installed outside the United States, it was reported by Carrier Corp.

Three of Carrier's absorption machines which use water as a refrigerant and derive cooling from steam will supply a total cooling effect equivalent to the melting of nearly a thousand tons of ice every 24 hours. The new building—which is being erected by the National Savings Bank of Chile (La Caja Nacional de Ahorros) and which will house its main offices—will have 17 floors, four of them underground. Its total floor area will be nearly three quarters of a million square feet.

The bank spaces, together with some 650 offices for commercial rental, and 21 apartments will be air conditioned by means of Carrier's Conduit Weathermaster system which provides individual room control. A 500-seat theater and a radio studio and auditorium will also have year-round air conditioning.

The absorption machines will be operated by steam from the same boilers used for winter heating.

Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid is made.

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of these offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. Ordnance District Offices do not have information on any other purchases.

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

Chicago Quartermaster Depot, QM Purchasing Division, Chicago, Illinois
Refrigerator, mechanically cooled, electric 2291 ea 52-101 B 6 Sep 51
Refrigerator, mechanically cooled, electric 3260 ea 52-109 B 5 Sep 51
Wright Patterson Air Force Base, Dayton, Ohio
Blower assembly, gasoline engine driven 254 ea 52-41-Q 27 Aug 51
Commandant Of The Marine Corps, Washington, D. C. Attn: Supply Dept., Procurement Section
Heaters, electric, water, storage, domestic, type II, size 66, Fed. spec. W-H-196 with exception 41 ea 63 31 Aug 51

GENERAL SERVICES ADMINISTRATION

The General Services Administration is now selling standard Federal Specifications at its ten Regional offices. In addition, indexes (lists) of the standard Military specifications may be inspected at the GSA Regional offices, but the Military specifications themselves are not for sale there. Inquiries may be addressed to the General Services Regional Office at any of the following locations:

Room 620, P.O. and Courthouse
Boston, Mass.
250 Hudson Street
New York City, N. Y.
Room 7287 Federal Supply Bldg.
7th and D. Streets S. W.
Washington 25, D. C.
50 Whitehall St., S. W.
Atlanta, Georgia
Room 528 Court House
219 S. Clark Street
Chicago, Illinois
1800 Federal Office Bldg.
911 Walnut Street
Kansas City, Missouri
1114 Commerce Street
Dallas 2, Texas
Bldg. 1-C
Denver Federal Center
Denver, Colorado
630 Sansome Street
San Francisco 11, Calif.
U. S. Courthouse
Seattle 4, Washington

Regional Information Officer, Region 3, General Services Administration, Washington 25, D. C.

Valves, Brass, Various types 2000 ea 5M-1914-R 8-22-51 and various sizes.

Regional Information Officer, Region 2, General Services Administration, 250 Hudson Street, New York 13, New York

Water coolers, New York, N. Y. (NY-BM-7 8-17-51
1834 Broadway, period from 2-219
date of installation to 6-30-52

General Services Administration, 630 Sansome Street, San Francisco, California

Los Angeles, California CR-1318 8-22-51
Western Pacific Building, furnishing and installing window type exhaust fans

U. S. DEPARTMENT OF COMMERCE

Chief, Procurement Section, National Bureau of Standards, Conn Ave. and Van Ness Sts., N.W., Washington 25, D. C.

Fittings, tees 100 ea B-2-301-52 8-20-51

Fittings, connectors, female 200 ea B-2-301-52 8-20-51
flared

Fittings, connector, male, 150 ea B-2-301-52 8-20-51
flared

Pipe compound, 1/2 pints 60 ea B-2-301-52 8-20-51

Fitting, short nut 150 ea B-2-301-52 8-20-51

Coupling, brass, rough, reducing 45 ea B-2-301-52 8-20-51

Filters, air, dusttop 48 ea B-2-301-52 8-20-51

Valves 40 ea B-2-322-52 8-22-51

Couplings 120 ea B-2-322-52 8-22-51

CONTRACTS AWARDED AS OF AUG. 8, 1951

Signal Corps Procurement Agency, 18th and Locust Sts., Philadelphia 3, Pennsylvania

Cooling System.—Motor Products Corporation, 2301 Davis St., North Chicago, Ill.

Humidity & Temperature Measuring Kit AN/AMQ-7 and Wire-sonde Set, AN/UNQ-4.—Kollsman Instrument Corporation, 80-04 45 Avenue, Elmhurst, Long Island, New York

Corps Of Engineers, U. S. Army, North Atlantic Div., Philadelphia District, 121 N. Broad St., Phila., Pa.

Flake Ice Machines.—41 ea., \$89,298.—York Corporation, 1616 Walnut Street, Philadelphia 3, Penna.

Iceplant, flake, 1-ton, gasoline driven, equip. only.—exceeds \$250,000.—George C. Lewis Co., 207 So. 24th Street, Philadelphia 3, Penna.

Dehumidifying Unit, electrically operated type.—29 ea., \$132,577.—Pittsburgh Electrodryer Corp., P. O. Box 1768, Pittsburgh 30, Pa.

Ice Making Unit, flake ice, motor driven.—12 ea., \$25,644.—York Corporation 1616 Walnut St., Philadelphia 3, Pa.

Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, Dayton, Ohio

Indicator, temperature, type B-18, cl-05D.—228 ea., \$31,787.—Aviation Engineering Corp., Woodside, Long Island, N. Y.

Facilities for production of coolers.—\$200,000.—General Motors Corp., Lockport, N. Y. Harrison Radiator Div.

Ships Parts Control Center, Naval Supply Depot, Mechanicsburg, Pa.

Air Conditioning Equipment Repair Parts.—Alco Valve Co., 865 Kingsland Ave., St. Louis 5, Mo.

Repair Parts for Heat Transfer Equipment.—C. H. Wheeler Mfg. Co., Lehigh & Sedgley Ave., Philadelphia, Pa.

Headquarters, U. S. Marine Corps, The Quartermaster General, Washington 25, D. C.

Drinking Water Coolers.—500 ea., \$61,200.—Sunroc Co., Glen Riddle, Pa.

Drinking Water Coolers.—200 ea., \$72,862.—Larco, Inc., 2409 San Fernando Road, Los Angeles 65, Calif.

Department Of Commerce, Maritime Administration

Fans.—3000 ea., \$82,500.—Westinghouse Electric Corp., 1625 K Street N. W., Washington 6, D. C.

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The Greatest VALUE in FOOD FREEZERS

THE FAMILY'S PREFERENCE EVERYWHERE



Revco, INC. • DEERFIELD, MICH.

MORE INFORMATION?

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Use Key No. for fastest service.

Genuine Joe says:
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Write for Catalog MU-40... Every repair shop needs one. It helps determine the catalog number and price of Wagner Motor Parts.

Wagner Electric Corporation
8471 PLYMOUTH AVENUE, SAINT LOUIS 14, MO., U. S. A.

WANTED GENERAL SALES MANAGER

Experienced in Commercial Refrigeration on National Distribution Basis for old West Coast Manufacturing Concern. Please enclose resume of experience and qualifications to P. O. Box 95, Huntington Park, Calif.

WE WILL BUY!

AIR CONDITIONING UNITS

1/2 hp or Larger

ANY QUANTITIES • MUST BE NEW

Write, Phone Or Call For IMMEDIATE ACTION

TRACO Industrial Corp.

455 W. 19 St., N. Y. 19, WAtkins 4-4302

(Send for Traco's complete list of sensational bargains)

NAED Offices Move to New Air Conditioned Quarters

NEW YORK CITY—The opening of new and larger headquarters offices by the National Association of Electrical Distributors at Norway House, 290 Madison Ave., here, was announced recently by Charles G. Pyle, who is executive director of NAED.

The new air conditioned offices are centrally located in the city and are convenient to both railroad and plane terminals.

G-E Delays 'Imperial' Range

BRIDGEPORT, Conn.—Introduction of the General Electric "Imperial" electric range model has been delayed by the G-E major appliance department because of uncertainties affecting the use of certain key materials, it has been learned here.

Philco 6 Mos. Sales Jump 16% over 1950 Period

PHILADELPHIA—Sales of Philco Corp. increased 16% to a total of \$171,023,000 in the first six months of 1951, as compared with \$147,012,000 in the same period a year ago, it was announced by William Balderson, president.

While earnings before taxes increased, net income after Federal and State income taxes and excess profits taxes in the first six months of 1951 was \$6,342,000 which, after preferred dividends, amounted to \$1.74 per share on the 3,525,372 shares of common stock now outstanding.

In the same period last year, when the excess profits tax was not in effect, net income totaled \$6,672,000 or \$1.84 per common share on the same number of shares.

In the second quarter of 1951, sales were \$57,499,000 and earnings after excess profits tax adjustments totaled \$1,988,000 or 53 cents per share of common stock.

"We have just concluded regional meetings with our distributors, and have received very substantial orders from them for all Philco products," Balderson reported. "During the past several months, distributors and dealers have shown a substantial improvement in balancing their inventories, and we are looking forward with confidence to the fall selling season."

"The action of Congress in tempering Regulation W and allowing trade-ins to be used as part or all of the down payment is a highly important development for the television and appliance industries, which will undoubtedly be reflected in greatly improved time payment sales in the third and fourth quarters."

Toastmaster Allocations Drop

CHICAGO—Allocations of its Toastmaster toasters will be reduced due to "continued and increasing shortages of critical materials," it was announced by Toastmaster division of McGraw Electric Co.

Copy Call!

Silver Anniversary Issue

September 17



LAST CALL!

(COPY CLOSES SEPT. 7)

Your company will undoubtedly want to be represented in the Silver Anniversary Issue of The NEWS.

In this issue which will trace the growth and development of the industry covering the past quarter century . . . your company will have an unusual opportunity to tell about its own accomplishments and progress during this great period of expansion of the industry as a whole.

It will be an issue of important and lasting interest.

Your advertisement telling of the background of the company and its products will tie in with the editorial content and be in keeping with this special occasion.

The closing date is drawing close—September 7.

If not already taken care of, write, wire, or phone your space reservation for this great issue!

Air Conditioning & Refrigeration News

The Newspaper of the Industry

Refrigeration Units WANTED

Desire to purchase 1/8 to 1-HP Sealed or Open type; standard brands; Complete condensing units; Also motors, controls, valves, etc. Give full details.

HARWOODE EXPORT CO.
31 E. 4 Street, New York 3, N. Y.

YOU CAN'T GET ALONG WITHOUT THIS NEW P. R. T. S. CATALOG



HARRY ALTER'S
SPRING-AND-SUMMER 1951

DEPENDABOOK No. 154

Over 9,000 Refrigeration PARTS and Supplies

To successfully conduct a business in these days of scarcities, you really need DEPENDABOOK No. 154... If it's available you'll find it listed in this latest edition.

"Service doesn't falter when it comes from Harry Alter"

The HARRY ALTER Co. WHOLESALE ONLY

1726 South Michigan Avenue Chicago 16, Ill.



134 Lafayette Street New York 13, N. Y.

New York BBB Warns Against Misleading 'Trade-In for Down Payment' Advertising

NEW YORK CITY—"Flat and unqualified statements that any trade-in will meet the full requirements for a down payment" in buying new appliances, television sets, or furniture "should not be used" in dealer advertising, the Better Business Bureau of New York City, Inc. declared in a special bulletin.

The bureau said such statements "are often inaccurate and have the capacity to mislead and deceive the public."

The bulletin was issued after shoppers for the bureau investigated dealers who advertised "no cash required" and "no money down" with a trade-in, following the recent relaxation of Regulation W.

It is "entirely appropriate and proper" for retailers to advertise the new credit terms and the fact that trade-ins may be used to meet the down payment on new merchandise, the bureau stated. However, the amount of trade-in is not always sufficient to meet the full down payment, it was asserted.

The bureau said shopping revealed that "in most cases where advertisers have made the flat assertion of 'no money down' or 'no cash required' with a trade-in, the advertisers either allowed an amount not sufficient to cover the down payment entirely or would not allow any trade-in at all as a down payment

unless the purchase was made at a higher price than the dealer was prepared to sell the merchandise without a trade-in."

Another practice, according to the bureau, is to require the purchaser to buy at full list price if a trade-in is accepted. At the same time, the dealer is prepared to sell at a lower price if no trade-in is included, it was claimed.

Said the bureau: "The effect of this latter practice is a boosting of the selling price to cover part or all of an inflated trade-in allowance, a procedure which is in violation of the announced policy of the Federal Reserve Board."

Three recommendations were made by the bureau after consultations with regional Federal Reserve administrators of Regulation W. They are:

"1. That any claims that no money or cash may be needed as a down payment with a trade-in, be qualified, in immediate conjunction with such claims, and in type large enough to prevent deception, to indicate clearly that this is true only in some cases and that the allowance may cover part or all of the required down payment."

"2. That no claims of 'No Down Payment,' 'No Deposit,' or any terms of similar meaning, be used, because under Regulation W a down payment is required, in cash or trade-in or both."

"3. That no retailer, in either advertising or selling, ask a higher price for an item which will be sold with a trade-in allowance applied toward the down payment, than he would for the same item without a trade-in."

CMP Allotments --

(Concluded from Page 1, Column 5) they are uncertain whether or not they will need any materials for the fourth quarter. They may feel that if they are not going to buy anything, they do not need to file.

"This is wrong," Holbrook asserted. "These manufacturers have got to get their CMP applications on record if they are going to get the critical metals in future quarters. From three to six months from now, they won't have any inventory problems."

Holbrook indicated that, to meet the situation that has developed, NPA may have to extend the deadline again. Or it may set aside additional materials drawn from reserves for the "free market" where manufacturers who do not receive allotments will have to hunt for their supplies.

Manly Fleischmann, head of the NPA, indicated that "free market" supplies of basic metals is steadily shrinking.

Furniture Mart Decides Against Fall Market

CHICAGO—Plan for holding an official fall market Oct. 22-27 has been voted down by the board of governors of the American Furniture Mart here after a poll of tenants.

This decision will not affect the fourth annual market of the National Association of Summer Furniture Manufacturers scheduled for the Mart that week.

A number of other manufacturers had reportedly sought a general fall showing at the same time the outdoor furniture group was convening, but the poll of tenants ran two to one against it.

Those who wish to exhibit their lines during the summer furniture show will be permitted to do so, but not under the official sponsorship of the American Furniture Mart, it was indicated.



H. A. WILLIS



W. E. SAYLOR

Kelvinator Shift --

(Concluded from Page 1, Column 3) electric range and water heater sales manager, in addition to his present duties as manager of rural and utility sales.

Willis joined Kelvinator in 1944 as supervisor of commercial advertising. He later served as manager of electric range advertising, and in 1947 became electric range and water heater sales manager.

Saylor, now in his 20th year with the company, served as Kelvinator sales promotion manager until 1944, when he became manager of rural and utility sales.

Crane Company of Pittsburgh To Distribute Sunroc Products

PITTSBURGH—H. R. Riggs of the Crane Co. here, announced that the company has been appointed distributor for the Sunroc Co. in the Greater Pittsburgh trading area, and will market Sunroc electric water cooling and purifying equipment.

Natural Gas Curb--

(Concluded from Page 1, Column 2) would be considered "large," according to the agency.

Present users of natural gas, including residential heating, are not affected by the order. It affects homes started after Aug. 22.

Although this edict has been officially issued by the federal agency, it can be overridden by the individual states affected, it was indicated by Deputy Petroleum Administrator Bruce K. Brown.

Congress tacked on a last-minute amendment (Section 704) to the Defense Production Act, which gives the states the final word on gas restrictions.

Natural gas sellers who think their supplies are not seriously threatened can obtain exemptions by wiring PAD before Aug. 23. After that date, such gas sellers would have to submit a full statement before Sept. 15 to the agency, which would then decide whether to exempt the utility from the order.

Acceptance of new home heating customers is handled in three different ways under the new order. Natural gas sellers in "old" natural gas areas can take new customers up to 1% of those they're now serving. This provision, according to Brown, is intended to help sellers of gas heaters and appliances to dispose of at least a part of their inventories.

In "new" gas communities which had less than 5,000 gas customers, utilities will be permitted to take on as many new central space heating customers as it wants for two years after beginning distribution.

In communities converting from

manufactured to natural gas, utilities can add during the first two years after the start of conversion new customers up to 10% of the number of customers of all kinds they served at the time of conversion.

"Central space heating customers" are defined in the PAD order as anyone who uses gas equipment to heat more than one room or to heat one room having more than 400 sq. ft. of floor area.

Purpose of the new gas order, according to Brown, is to prevent too many new customers from taking natural gas away from present users and new defense plants.

Shortage of steel for new pipelines is said to be the bottleneck in expansion of the industry, and government officials predict that unless the weather is mild next winter, some vital defense plants may have to close for lack of gas. Civilian plants and household users may be affected too, they believe.

Covered by the order is the District of Columbia and the following states: Connecticut, Delaware, Kentucky (but only those parts of Kentucky served with gas supplied by a subsidiary of the Columbia Gas System, Inc., or by Louisville Gas & Electric Co.), Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, West Virginia (only those portions served with gas supplied by a subsidiary of the Columbia Gas System, Inc.), and Wisconsin.

Buffalo Firm Leases Space

BUFFALO, N. Y.—The Frontier Radio & Appliance Co. has leased 6,000 sq. ft. of warehouse space at 277 Niagara St.

Profit Maker of the Month

GAS UNIT HEATER

Steel heat exchanger model shown provides top heating efficiency at low cost. Available in standard propeller fan, duct or blower styles. Automatic controls. Tested and approved by A.G.A. Send for Bulletin 23.

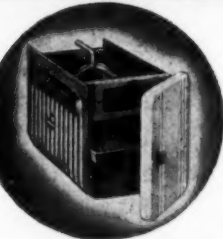
Yours Free! New fact-filled book on air conditioning—excellent sales tool to use with customers. Write today for "Practical Pointers."

US AIR CO. UNITED STATES AIR CONDITIONING CORPORATION

3308 Como Ave. S.E., Minneapolis 14, Minn.

MORE FROZEN FOOD STORAGE

EQUALIZED REFRIGERANT DISTRIBUTION



REMOVABLE SHELVES
FULL LENGTH DOOR
CONCEALED CONTROL MOUNTING

Stainless Steel, all refrigerants, Evaporators. Sizes 3½ to 10 cubic feet.

Write for bulletin E-6

STANDARD REFRIGERATION CO.

332 S. Hoyne Ave., Chicago 12, Ill.



STAINLESS STEEL EVAPORATORS, LIQUID REVERSERS, COUNTERFLOW CONDENSERS, SHELL AND COIL CONDENSERS

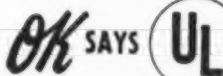
WALK-IN COOLERS

AVAILABLE FOR IMMEDIATE DELIVERY

6' x 6' x 6½' Walk-In Only..... \$245
6' x 6' x 6½' Self-Contained ½ H.P. \$423
6' x 6' x 6½' Self-Contained ½ H.P. \$465

Loudon
MINNEAPOLIS

COMMERCIAL REFRIGERATION EQUIPMENT
2524 27th Avenue South, Minneapolis, Minnesota



ON THE COMPLETE LINE OF

RAPID Refillable DEHYDRATORS

(SIZES 5 CU. IN. TO 200 CU. IN.)

WRITE FOR CATALOG AND PRICE LIST
(Give Wholesaler's Name)



Fine PRODUCTS CO.

4837 SO. WESTERN BLVD., CHICAGO 9, ILL.

NO Other Line Gives You So Much Quality, Safety, Economy!

BRUNNER
SINCE 1906

helps you handle any size job

IMPORTANT REMINDER to Air Conditioning and Refrigeration General Contractors

This is addressed to those General Contractors who are faced with today's complex problems of complying with equipment specifications, getting the equipment and also needing technical data and engineering help based upon up-to-the minute experience with the unusual as well as the usual job.

BRUNNER offers YOU Air Conditioning and Refrigeration Condensing Units up to 75 tons capacity, incorporating design features providing maximum adaptability to specific application requirements.

BRUNNER offers YOU an experienced engineering staff qualified to assist in working out problems of selection, installation and operation.

BRUNNER offers YOU plant capacity and manufacturing flexibility enabling you to meet delivery as well as equipment specifications.

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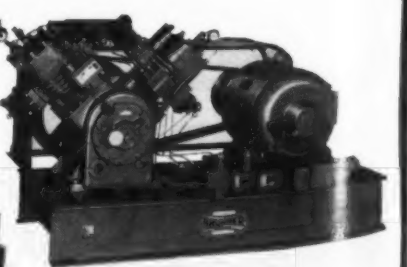
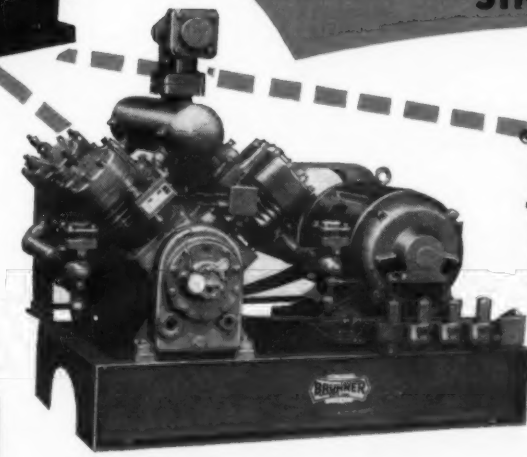
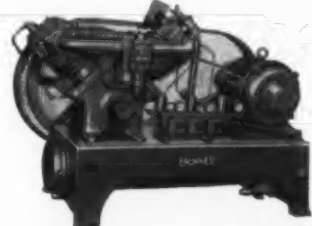
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